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**COSPAS-SARSAT  
Satellite Orbit Predictor  
Volume XIV**

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**COSPAS-SARSAT  
Satellite Orbit Predictor  
Volume XIV**

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National Aeronautics and  
Space Administration

**Goddard Space Flight Center**  
Greenbelt, MD

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**MEMORANDUM FOR: Users of NASA Tech Memo 85015**

**FROM:** Jim Bailey  
**SUBJECT:** User Feedback

For the past three years NOAA, through a series of interagency transitions, has been gradually assuming operational responsibility for the SARSAT ground segment. One of the biggest transitions is the new Mission Control Center (MCC), which will be operational near the end of 1989.

Another item in this transition is NASA Technical Memorandum 85015, "COSPAS-SARSAT Satellite Orbit Predictor", a tech memo publication which you can receive periodically from NASA. At this time we would like to update the distribution list and poll users of the document about the utility of the document.

We request that you respond to the following questions:

1. Desire to receive future issues.
2. Present usage of document: (training, operation, etc.).
3. Number of copies needed at this address.
4. Additional comments.

Please respond to:

NOAA SARSAT Operations Manager  
NOAA/NESDIS  
SARSAT Operations Division  
Code E/SP  
Washington, D.C. 20233

THIS ALMANAC COVERS THE PERIOD OCTOBER 16, 1989 THROUGH  
APRIL 15, 1989 AND WILL BE REPLACED PERIODICALLY

## **GLOSSARY**

AOS	Acquisition of Signal
COSPAS	Space System for Search of Vessels in Distress (USSR)
ELT	Emergency Locator Transmitter
EPIRB	Emergency Position Indicating Radio Beacon
GMT	Greenwich Mean Time
LOS	Loss of Signal
LUT	Local User Terminal
SARSAT	Search and Rescue Satellite Aided Tracking

## SATELLITE ORBIT PREDICTOR

The satellite orbit predictor is a graphical aid for determining the relationship between the satellite (SARSAT or COSPAS) orbit, antenna coverage of the spacecraft and coverage of the LUT's. The predictor allows the user to quickly visualize if a selected position will probably be detected and is composed of a base map and a satellite track overlay for each satellite. Additionally, a table of equator crossings for each satellite is included.

In order for a LUT to receive ELT/EPIRB information from a satellite, mutual visibility between the satellite, LUT and ELT/EPIRB must occur. Mutual visibility requires two simultaneous conditions:

- a. The satellite subtrack or ground track must lie within a LUT coverage circle for at least 4 minutes.
- b. and the suspected ELT/EPIRB must lie within the satellite antenna coverage swath during the 4 minute period.

The base map is a polar stereographic projection of the northern hemisphere. The LUT coverage circles are based on the LUT seeing the satellite at the horizon. On projections of this type equal increments of latitude are not equidistant. Therefore, the map includes a dot matrix in the ocean areas with the dots printed as a one degree latitude by one degree longitude field. Another property of the projection is that the center of the LUT coverage does not coincide with the actual geographical position of the LUT.

The overlay shows the satellite ground track or subtrack (black) starting from the ascending node (northbound equator crossing) and continuing minute by minute across the overlay. In addition, the 10 degree coverage limits of the spacecraft antenna (red) are plotted on both sides of the subtrack. The yellow lines connecting the antenna coverage swath and the subtrack indicate time in minutes. Just to the west of the left hand antenna coverage limit is a short line segment (labeled "next pass") which is the index for the next ascending note equator crossing.

The table of satellite equator crossings contains the zulu date/time group that a satellite will cross the equator northbound, the orbit number, and the longitude that it will cross the equator. A particular orbit starts when the satellite crosses the equator northbound (ascending) and ends just prior to the next ascending node equator crossing. The longitudes are listed in degrees east longitude, i.e., a negative number in this column is a west longitude.

To use the predictor, first select an equator crossing from the table and then rotate the satellite overlay to position the satellite subtrack over the selected equator crossing longitude. The predictor now represents the satellite ground track for the selected orbit. Subsequent and previous orbit depictions can be obtained by using the "next pass" index.

For subsequent orbits... mark or note the longitude beneath the "next pass" index and rotate the overlay clockwise to position the satellite subtrack over the new equator crossing longitude. For previous orbits, rotate the overlay counterclockwise to position the "next pass" index over the present equator crossing. The ground track for the previous pass will be to the right of the original orbit, and the subtrack for subsequent orbits will be to the left of the original equator crossing. One can do this all the way around the wheel without sacrificing a great deal of accuracy.

So far we have just looked at positioning the overlay to obtain a depiction of a satellite ground track for a selected orbit number and then ground tracks for later and earlier orbits. Now let's examine what information we can get from the depiction. When the subtrack intersects a LUT coverage circle, the LUT will receive signals from the satellite for the time period that the subtrack is within a coverage circle. An ELT/EPIRB is visible to the satellite when it lies within the antenna coverage limits (red lines). Mutual visibility occurs when an ELT/EPIRB is within satellite's field-of-view at the same time that the satellite subtrack lies within a LUT coverage circle. From this, we can see for a selected orbit if a spacecraft will be seen by a LUT and approximately where ELTs/EPIRBs must be located to be processed by a LUT. The predictor can be used for more sophisticated problems such as approximate AOS and LOS at a LUT, next time an ELT/EPIRB will be in mutual visibility, and when/if an area of interest will be seen by a satellite and a LUT.

To determine approximate AOS and LOS at a LUT, refer to the equator crossing table and note the time (in zulu) that the satellite will cross the equator. Next, position the overlay as previously discussed and count the yellow lines from the equator to the point at which the subtrack intersects the LUT coverage circle. Add the number of minutes to the time of equator crossing and you have the approximate AOS. Continue counting the yellow lines until the subtrack exists the LUT circle and add them to the AOS time and you have the approximate LOS as well as the approximate duration of the pass. (See example 1.)

Finding out when the next time an ELT/EPIRB will be in mutual visibility of the satellite and LUT is simply a combination of the above two tasks. From the original orbit, move the overlay clockwise orbit-by-orbit using the "next pass" index until mutual visibility is established and then reference the equator crossing table for the time of equator crossing using the longitude now under the ascending node. By counting the minutes since equator crossing and adding them to the time of equator crossing, one comes up with the approximate time the ELT/EPIRB will next be in mutual visibility. (See example 2.)

Using the orbit predictor to determine when and if an area of interest will be reviewed by the satellite and the LUT is a bit more complicated. First, locate the area of interest on the base map, refer to the equator crossing table for a longitude within plus or minus 20 degrees that has an equator crossing time within the appropriate time frame, position the overlay at the selected longitude and determine if mutual visibility will exist. (See example 3.) If there is not mutual visibility on that orbit, rotate the overlay using the "next page" index until you determine that mutual visibility exists or that the interest area is too distant from a LUT or the satellite subtrack for mutual visibility to exist.

## EXAMPLE NO. 1

- Refer to the equator crossing table for time and longitude of the desired equator crossing:

TIME (GMT)	E. LONGITUDE	ORBIT
day hr mn sc	deg.dg	
292 9 32 4	19.94	1523
292 22 17 26	-6.52	1524
292 13 2 48	-32.99	1525
292 14 48 9	-59.45	1526<
292 16 33 31	-85.92	1527
292 18 18 52	-112.38	1528

From the equator crossing table, select orbit number 1526. The zulu date/time group for the equator crossing is 292 (19 Oct) 1448:09. The longitude of the equator crossing is 59.45 W.

- Position the overlay so the subtrack coincides with the northbound equator crossing and then count the number of yellow lines (minutes) from the equator crossing to the point where the subtrack enters a LUT circle (AOS) and exits a LUT circle (LOS).

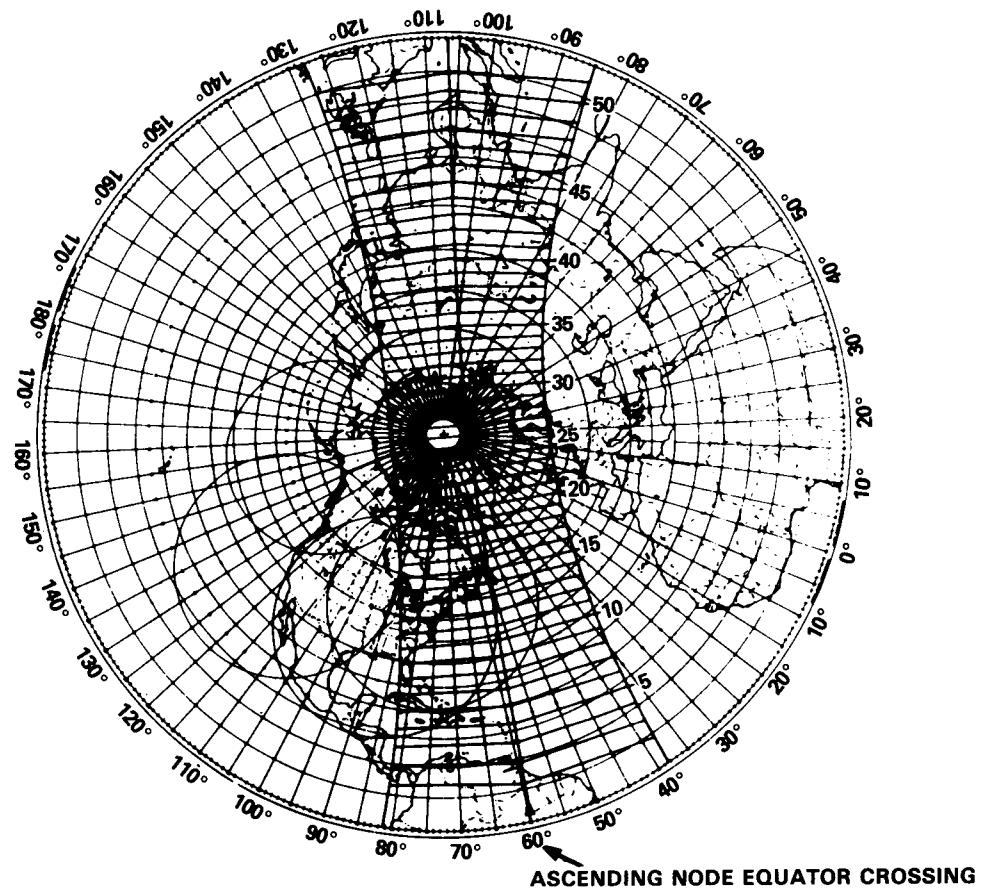


Figure 1

Position the overlay so the ascending node is set at 59.45 W. Now count the number of yellow lines from the equator until the subtrack intersects a LUT circle. In this case the subtrack intersects a LUT circle 5 minutes after crossing the equator, the subtrack lies within the LUT circle for 14 minutes before exiting. Adding these times to the equator crossing time of 1448:09 yields an approximate AOS of 1453:09 and an approximate LOS of 1504:09.

### EXAMPLE NO. 2

1. From the original orbit move the overlay clockwise using the "next pass" index until mutual visibility is established.

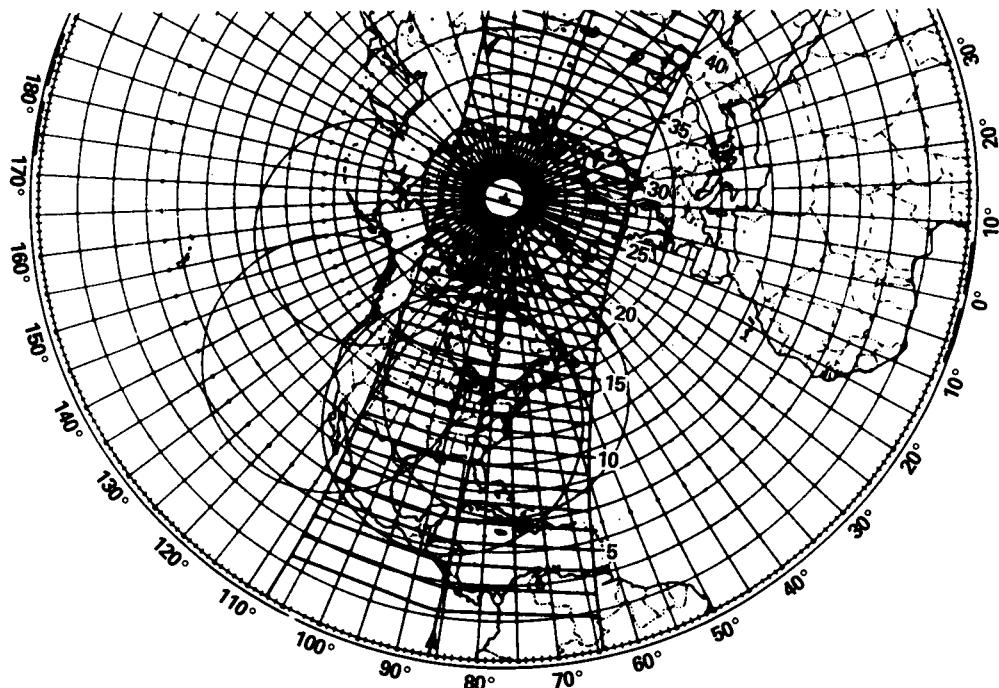


Figure 2

Assume there is an ELT located at 40 00.0 N. and 080 00.0 W. The original orbit (1526) is within mutual visibility, and we want to know the next time the ELT will be in mutual visibility. The "next pass" index is at approximately 087 W. Rotate the overlay until the subtrack coincides with 087 W.

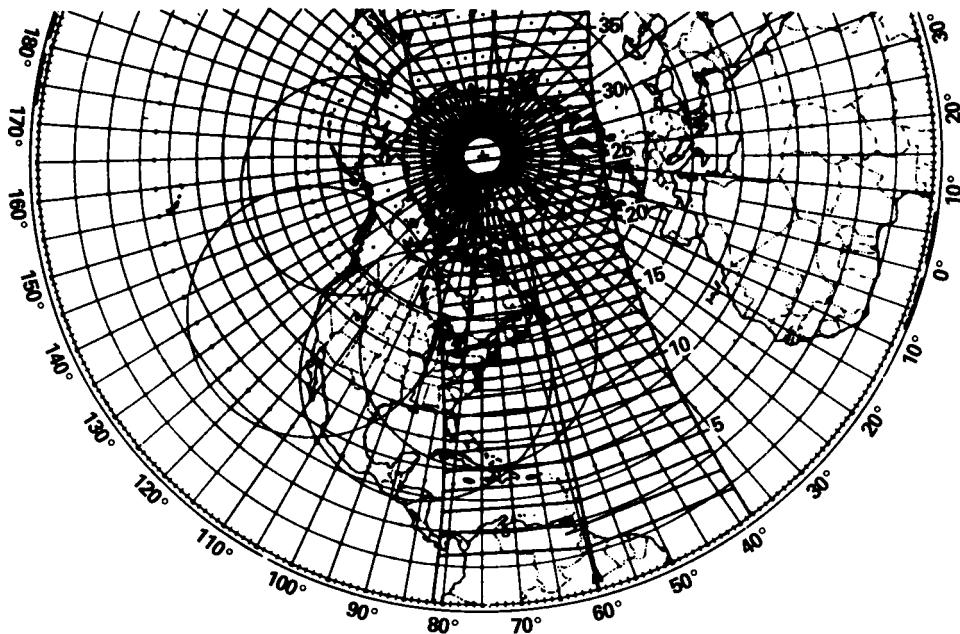


Figure 3

By looking at the subtrack and LUT circle, we see that the satellite will see the ELT and LUT on the next orbit (#1528). Adding the times to the equator crossing time (1633:31) gives us an approximate AOS of 1637, a 16 minute pass with an approximate LOS of 1653.

### EXAMPLE NO. 3

**SCENARIO:** Assume you are interested in using the SARSAT system to locate the possible wreckage of a light aircraft that departed Charleston, South Carolina, enroute to Roanoke, Virginia. The aircraft departed Charleston at 1300Z on 19 October 1982 and never reached Roanoke.

1. Locate the route of flight or suspected ELT/EPIRB position on the base map and note the approximate longitude.

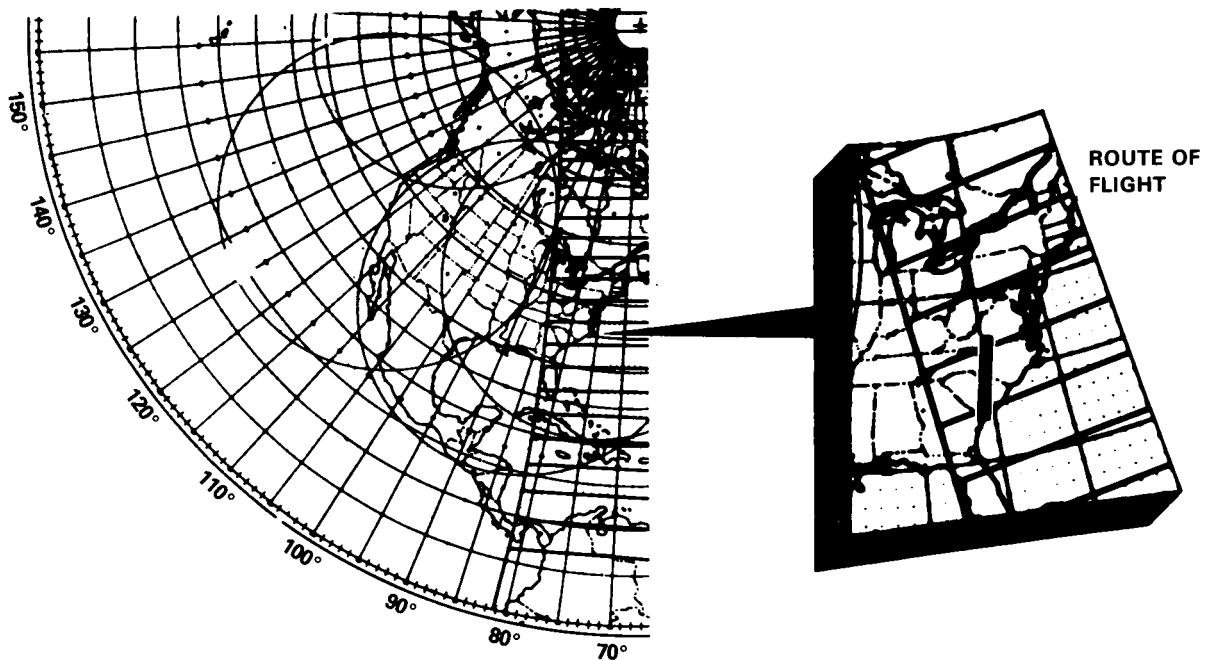


Figure 4

The Route of flight is marked in the expanded box: approximate longitude is 080 W.

2. Refer to the equator crossing table and select an orbit within 20 degrees of the approximate longitude and within the appropriate time frame.

TIME (GMT)	E. LONGITUDE	ORBIT
day hr mn sc	deg dg	
292 11 17 26	-6.52	1524
292 13 2 48	-32.99	1525
292 14 48 9	-59.45	1526
292 16 33 31	-85.92	1527
292 18 88 52	-112.38	1528

From the table there are two orbits that are within plus or minus 20 degrees of the route of flight; 1526 and 1527. Orbit #1526 is the earliest (1448Z) and is within our time frame.

3. Position the overlay at the selected longitude and determine if mutual visibility exists or will exist.

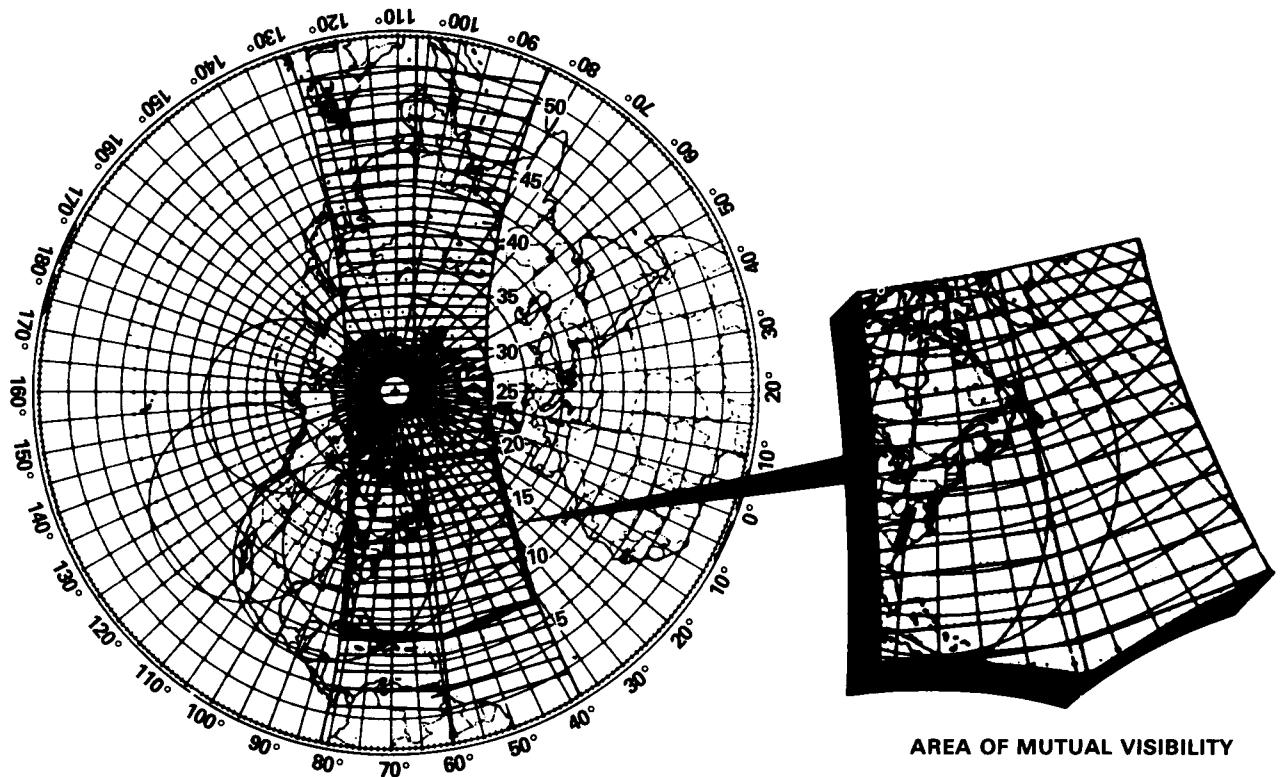


Figure 5

Remember, mutual visibility exists when the ELT/EPIRB is within the satellite antenna swath and the satellite subtrack is within a LUT circle. We can see that the ground track is within the LUT circle. Also, the route of flight we are interested in is within the antenna swath at the same time the ground track is within the LUT circle. Therefore, mutual visibility exists on orbit #1526.

## **CALENDAR 1989**

## **DAYS OF WEEK AND DAYS OF THE YEAR**

	JAN	FEB	MAR	ARP	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	SU	1	W	32	W	60	SA	91	M	121	TH	152
2	M	2	TH	33	TH	61	SU	92	TU	122	F	153
3	TU	3	F	34	F	62	M	93	W	123	SA	154
4	W	4	SA	35	SA	63	TU	94	TH	124	SU	155
5	TH	5	SU	36	SU	64	W	95	F	125	M	156
6	F	6	M	37	M	65	TH	96	SA	126	TU	157
7	SA	7	TU	38	TU	66	F	97	SU	127	W	158
8	SU	8	W	39	W	67	SA	98	M	128	TH	159
9	M	9	TH	40	TH	68	SU	99	TU	129	F	160
10	TU	10	F	41	F	69	M	100	W	130	SA	161
11	W	11	SA	42	SA	70	TU	101	TH	131	SU	162
12	TH	12	SU	43	SU	71	W	102	F	132	M	163
13	F	13	M	44	M	72	TH	103	SA	133	TU	164
14	SA	14	TU	45	TU	73	F	104	SU	134	W	165
15	SU	15	W	46	W	74	SA	105	M	135	TH	166
16	M	16	TH	47	TH	75	SU	106	TU	136	F	167
17	TU	17	F	48	F	76	M	107	W	137	SA	168
18	W	18	SA	49	SA	77	TU	108	TH	138	SU	169
19	TH	19	SU	50	SU	78	W	109	F	139	M	170
20	F	20	M	51	M	79	TH	110	SA	140	TU	171
21	SA	21	TU	52	TU	80	F	111	SU	141	W	172
22	SU	22	W	53	W	81	SA	112	M	142	TH	173
23	M	23	TH	54	TH	82	SU	113	TU	143	F	174
24	TU	24	F	55	F	83	M	114	W	144	SA	175
25	W	25	SA	56	SA	84	TU	115	TH	145	SU	176
26	TH	26	SU	57	SU	85	W	116	F	146	M	177
27	F	27	M	58	M	86	TH	117	SA	147	TU	178
28	SA	28	TU	59	TU	87	F	118	SU	148	W	179
29	SU	29				88	SA	119	M	149	TH	180
30	M	30				TH	89	SU	120	TU	150	F
31	TU	31				F	90			W	151	
										M	212	TH
										243		TU
										304		SU
										334		365

# CALENDAR 1990

## DAYS OF WEEK AND DAYS OF THE YEAR

	JAN	FEB	MAR	ARP	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC												
1	M	1	TH	32	TH	60	SU	91	TU	121	F	152	SU	182	W	213	SA	244	M	274	TH	305	SA	335
2	TU	2	F	33	FR	61	M	92	W	122	SA	153	M	183	TH	214	SU	245	TU	275	F	306	SU	336
3	WU	3	SA	34	SA	62	TU	93	TH	123	SU	154	TU	184	F	215	M	246	W	276	SA	307	M	337
4	TH	4	SU	35	SU	63	W	94	F	124	M	155	W	185	SA	216	TU	247	TH	277	SU	308	TU	338
5	F	5	M	36	M	64	TH	95	SA	125	TU	156	TH	186	SU	217	W	248	F	278	M	309	W	339
6	SA	6	TU	37	TU	65	F	96	SU	126	W	157	F	187	M	218	TH	249	SA	279	TU	310	TH	340
7	SU	7	W	38	W	66	SA	97	M	127	TH	158	SA	188	TU	219	F	250	SU	280	W	311	F	341
8	M	8	TH	39	TH	67	SU	98	TU	128	F	159	SU	189	W	220	SA	251	M	281	TH	312	SA	342
9	TU	9	F	40	F	68	M	99	W	129	SA	160	M	190	TH	221	SU	252	TU	282	F	313	SU	343
10	W	10	SA	41	SA	69	TU	100	TH	130	SU	161	TU	191	F	222	M	253	W	283	SA	314	M	344
11	TH	11	SU	42	SU	70	W	101	F	131	M	162	W	192	SA	223	TU	254	TH	284	SU	315	TU	345
12	F	12	M	43	M	71	TH	102	SA	132	TU	163	TH	193	SU	224	W	255	F	285	M	316	W	346
13	SA	13	TU	44	TU	72	F	103	SU	133	W	164	F	194	M	225	TH	256	SA	286	TU	317	TH	347
14	SU	14	W	45	W	73	SA	104	M	134	TH	165	SA	195	TU	226	F	257	SU	287	W	318	F	348
15	M	15	TH	46	TH	74	SU	105	TU	135	F	166	SU	196	W	227	SA	258	M	288	TH	319	SA	349
16	TU	16	F	47	F	75	M	106	W	136	SA	167	M	197	TH	228	SU	259	TU	289	F	320	SU	350
17	W	17	SA	48	SA	76	TU	107	TH	137	SU	168	TU	198	F	229	M	260	W	290	SA	321	M	351
18	TH	18	SU	49	SU	77	W	108	F	138	M	169	W	199	SA	230	TU	261	TH	291	SU	322	TU	352
19	F	19	M	50	M	78	TH	109	SA	139	TU	170	TH	200	SU	231	W	262	F	292	M	323	W	353
20	SA	20	TU	51	TU	79	F	110	SU	140	W	171	F	201	M	232	TH	263	SA	293	TU	324	TH	354
21	SU	21	W	52	W	80	SA	111	M	141	TH	172	SA	202	TU	233	F	264	SU	294	W	325	F	355
22	M	22	TH	53	TH	81	SU	112	TU	142	F	173	SU	203	W	234	SA	265	M	295	TH	326	SA	356
23	TU	23	F	54	F	82	M	113	W	143	SA	174	M	204	TH	235	SU	266	TU	296	F	327	SU	357
24	W	24	SA	55	SA	83	TU	114	TH	144	SU	175	TU	205	F	236	M	267	W	297	SA	328	M	358
25	TH	25	SU	56	SU	84	W	115	F	145	M	176	W	206	SA	237	TU	268	TH	298	SU	329	TU	359
26	F	26	M	57	M	85	TH	116	SA	146	TU	177	TH	207	SU	238	W	269	F	299	M	330	W	360
27	SA	27	TU	58	TU	86	F	117	SU	147	W	178	F	208	M	239	TH	270	SA	300	TU	331	TH	361
28	SU	28	W	59	W	87	SA	118	M	148	TH	179	SA	209	TU	240	F	271	SU	301	W	332	F	362
29	M	29			TH	88	SU	119	TU	149	F	180	SU	210	W	241	SA	272	M	302	TH	333	SA	363
30	TU	30			F	89	M	120	W	150	SA	181	M	211	TH	242	SU	273	TU	303	F	334	SU	364
31	W	31			SA	90		TH	151				TU	212	F	243			W	304			M	365

**SATELLITE C2: ORBITAL ELEMENTS IN CLASSICAL SPACE**

EPOCH: 1989 AUG 18 10:13:56

SM AXIS : 7.35406493D+03 km  
INCLINATION : 8.29365281D+01 deg  
PERIGEE : 2.73596722D+02 degECCENTRICITY : 0.38120623D-02  
LONGITUDE : 2.35835924D+02 deg  
TRUE ANOMALY : 1.96546858D+02 deg

R/T 121.5:ON R/T 406:ON

GLOGAL 406:ON

**SATELLITE C3: ORBITAL ELEMENTS IN CLASSICAL SPACE**

EPOCH: 1989 AUG 18 13:51:25

SM AXIS : 7.35652869D+03 km  
INCLINATION : 8.29502541D+01 deg  
PERIGEE : 7.09613851D+01 degECCENTRICITY : 0.29017938D-02  
LONGITUDE : 2.85349167+02 deg  
TRUE ANOMALY : 4.00984200D+01 deg

R/T 121.5:ON R/T 406:ON

GLOGAL 406:ON

**SATELLITE C4: ORBITAL ELEMENTS IN CLASSICAL SPACE**

EPOCH: 1989 AUG 18 15:36:37

SM AXIS : 7.36911706D+03 km  
INCLINATION : 8.29666221D+01 deg  
PERIGEE : 1.42271815D+02 degECCENTRICITY : 0.43928714D-02  
LONGITUDE : 1.48012432D+02 deg  
TRUE ANOMALY : 2.37247966D+02 deg

R/T 121.5:ON R/T 406:ON

GLOGAL 406:ON

**SATELLITE S2: ORBITAL ELEMENTS IN CLASSICAL SPACE**

EPOCH: 1989 AUG 18 10:33:01

SM AXIS : 7.22110337D+03 km  
INCLINATION : 9.91513282D+01 deg  
PERIGEE : 1.10868516D+02 degECCENTRICITY : 0.10746719D-02  
LONGITUDE : 2.18626975D+02 deg  
TRUE ANOMALY : 1.72603741D+00 deg

R/T 121.5:ON R/T 406:ON

GLOGAL 406:OFF

**SATELLITE S3: ORBITAL ELEMENTS IN CLASICAL SPACE**

EPOCH: 1989 AUG 18 14:39:04

SM AXIS : 7.18367839D+03 km  
INCLINATION : 9.86467694D+01 deg  
PERIGEE : 4.79503828D+01 degECCENTRICITY : 0.18152942D-02  
LONGITUDE : 2.59926908D+02 deg  
TRUE ANOMALY : 6.53365976D+01 deg

R/T 121.5:ON R/T 406:OFF

GLOGAL 406:OFF

**SATELLITE S4: ORBITAL ELEMENTS IN CLASSICAL SPACE**

EPOCH: 1989 AUG 18 09:53:03

SM AXIS : 7.22592099D+03 km  
INCLINATION : 9.89442664D+01 deg  
PERIGEE : 4.05523189D+01 degECCENTRICITY : 0.19762858D-02  
LONGITUDE : 1.74156315D+02 deg  
TRUE ANOMALY : 7.76050924D+01 deg

R/T 121.5:ON R/T 406:ON

GLOGAL 406:ON

**SATELLITE C2****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

288 00:11:53	166.77	32901
288 01:56:45	140.42	32902
288 03:41:37	114.08	32903
288 05:26:29	87.74	32904
288 07:11:21	61.40	32905
288 08:56:13	35.05	32906
288 10:41:05	-8.71	32907
288 12:25:57	-17.63	32908
288 14:10:49	-43.97	32909
288 15:55:41	-70.32	32910
288 17:40:33	-96.66	32911
288 19:25:25	-123.00	32912
288 21:10:17	-149.34	32913
288 22:55:09	-175.69	32914

**SATELLITE C3****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

288 01:00:06	-155.59	26642
288 02:45:01	178.06	26643
288 04:29:57	151.71	26644
288 06:14:52	125.35	26645
288 07:59:47	98.99	26646
288 09:44:42	72.64	26647
288 11:29:37	46.28	26648
288 13:14:32	19.93	26649
288 14:59:27	-6.43	26650
288 16:44:22	-32.78	26651
288 18:29:18	-59.14	26652
288 20:14:13	-85.49	26653
288 21:59:08	-111.85	26654
288 23:44:03	-138.20	26655

**SATELLITE C4****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

288 01:12:06	64.15	1407
288 02:57:00	37.80	1408
288 04:41:54	11.45	1409
288 06:26:48	-14.90	1410
288 08:11:42	-41.25	1411
288 09:56:36	-67.60	1412
288 11:41:30	-93.95	1413
288 13:26:24	-120.30	1414
288 15:11:18	-146.65	1415
288 16:56:12	-173.00	1416
288 18:41:06	160.65	1417
288 20:26:00	134.30	1418
288 22:10:54	107.95	1419
288 23:55:47	81.59	1420

289 00:40:01	157.97	32915
289 02:24:53	131.63	32916
289 04:09:45	105.29	32917
289 05:54:37	78.94	32918
289 07:39:29	52.60	32919
289 09:24:22	26.26	32920
289 11:09:14	-0.08	32921
289 12:54:06	-26.42	32922
289 14:38:58	-52.77	32923
289 16:23:50	-79.11	32924
289 18:08:42	-105.45	32925
289 19:53:34	-131.79	32926
289 21:38:26	-158.14	32927
289 23:23:18	175.52	32928

289 01:28:58	-164.56	26656
289 03:13:53	169.09	26657
289 04:58:48	142.73	26658
289 06:43:44	116.38	26659
289 08:28:39	90.02	26660
289 10:13:34	63.67	26661
289 11:58:29	37.31	26662
289 13:43:24	10.95	26663
289 15:28:19	-15.40	26664
289 17:13:14	-41.76	26665
289 18:58:09	-68.11	26666
289 20:43:05	-94.47	26667
289 22:28:00	-120.82	26668

289 01:40:41	55.24	1421
289 03:25:35	28.89	1422
289 05:10:29	2.54	1423
289 06:55:23	-23.81	1424
289 08:40:17	-50.16	1425
289 10:25:11	-76.51	1426
289 12:10:05	-102.86	1427
289 13:54:59	-129.21	1428
289 15:39:53	-155.56	1429
289 17:24:47	178.09	1430
289 19:09:41	151.74	1431
289 20:54:35	125.39	1432
289 22:39:29	99.04	1433

290 01:08:10	149.18	32929
290 02:53:02	122.84	32930
290 04:37:54	96.49	32931
290 06:22:46	70.15	32932
290 08:07:38	43.81	32933
290 09:52:30	17.47	32934
290 11:37:22	-8.88	32935
290 13:22:14	-35.22	32936
290 15:07:06	-61.56	32937
290 16:51:58	-87.90	32938
290 18:36:50	-114.25	32939
290 20:21:42	-140.59	32940
290 22:06:34	-166.93	32941
290 23:51:26	166.73	32942

290 00:12:55	-147.18	26669
290 01:57:50	-173.53	26670
290 03:42:45	160.11	26671
290 05:27:40	133.76	26672
290 07:12:35	107.40	26673
290 08:57:30	81.05	26674
290 10:42:26	54.69	26675
290 12:27:21	28.34	26676
290 14:12:16	1.98	26677
290 15:57:11	-24.37	26678
290 17:42:06	-50.73	26679
290 19:27:01	-77.09	26680
290 21:11:56	-103.44	26681
290 22:56:52	-129.79	26682

290 00:24:23	72.69	1434
290 02:09:17	46.34	1435
290 03:54:11	19.99	1436
290 05:39:05	-6.36	1437
290 07:23:59	-32.71	1438
290 09:08:53	-59.06	1439
290 10:53:47	-85.41	1440
290 12:38:41	-111.76	1441
290 14:23:35	-138.11	1442
290 16:08:29	-164.46	1443
290 17:53:23	169.19	1444
290 19:38:17	142.84	1445
290 21:23:11	116.49	1446
290 23:08:05	90.14	1447

291 01:36:18	140.38	32943
291 03:21:10	114.04	32944
291 05:06:02	87.70	32945
291 06:50:54	61.36	32946
291 08:35:46	35.01	32947
291 10:20:38	8.67	32948
291 12:05:30	-17.67	32949
291 13:50:22	-44.01	32950
291 15:35:14	-70.36	32951
291 17:20:06	-96.70	32952
291 19:04:58	-123.04	32953
291 20:49:50	-149.38	32954
291 22:34:43	-175.72	32955

291 00:41:47	-156.15	26683
291 02:26:42	177.49	26684
291 04:11:37	151.14	26685
291 05:56:32	124.78	26686
291 07:41:27	98.43	26687
291 09:26:22	72.07	26688
291 11:11:17	45.72	26689
291 12:56:13	19.36	26690
291 14:41:08	-6.99	26691
291 16:26:03	-33.35	26692
291 18:10:58	-59.70	26693
291 19:55:57	-86.06	26694
291 21:40:48	-112.41	26695
291 23:25:43	-138.77	26696

291 00:52:59	63.79	1448
291 02:37:53	37.43	1449
291 04:22:47	11.08	1450
291 06:07:41	-15.27	1451
291 07:52:35	-41.62	1452
291 09:37:29	-67.97	1453
291 11:22:23	-94.32	1454
291 13:07:17	-120.67	1455
291 14:52:11	-147.02	1456
291 16:37:05	-173.37	1457
291 18:21:59	160.28	1458
291 20:06:52	133.93	1459
291 21:51:46	107.58	1460
291 23:36:40	81.23	1461

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT	
day hr mn sc	deg dg			day hr mn sc	deg dg			day hr mn sc	deg dg		
288 00:31:58	-114.19	24938		288 00:43:03	-78.11	15973		288 00:51:26	-164.91	5438	
288 02:14:00	-139.70	24939		288 02:24:18	-103.43	15974		288 02:33:33	169.56	5439	
288 03:56:02	-165.21	24940		288 04:05:32	-128.73	15975		288 04:15:39	144.04	5440	
288 05:38:03	169.30	24941		288 05:46:47	-154.05	15976		288 05:57:45	118.52	5441	
288 07:20:05	143.79	24942		288 07:28:02	-179.37	15977		288 07:39:52	92.98	5442	
288 09:02:07	118.28	24943		288 09:09:16	155.33	15978		288 09:21:58	67.46	5443	
288 10:44:09	92.78	24944		288 10:50:31	130.01	15979		288 11:04:04	41.94	5444	
288 12:26:11	67.27	24945		288 12:31:45	104.71	15980		288 12:46:11	16.40	5445	
288 14:08:13	41.76	24946		288 14:13:00	79.39	15981		288 14:28:17	-9.12	5446	
288 15:50:14	16.27	24947		288 15:54:15	54.08	15982		288 16:10:23	-34.64	5447	
288 17:32:16	-9.24	24948		288 17:35:29	28.77	15983		288 17:52:30	-60.17	5448	
288 19:14:18	-34.75	24949		288 19:16:44	3.46	15984		288 19:34:36	-85.69	5449	
288 20:56:20	-60.26	24950		288 20:57:58	-21.85	15985		288 21:16:42	-111.21	5450	
288 22:38:22	-85.76	24951		288 22:39:13	-47.16	15986		288 22:58:49	-136.75	5451	
289 00:20:24	-111.27	24952		289 00:20:27	-72.47	15987		289 00:40:55	-162.27	5452	
289 02:02:25	-136.76	24953		289 02:01:42	-97.78	15988		289 02:23:01	172.21	5453	
289 03:44:27	-162.27	24954		289 03:42:57	-123.10	15989		289 04:05:08	146.67	5454	
289 05:26:29	172.22	24955		289 05:24:11	-148.40	15990		289 05:47:14	121.15	5455	
289 07:08:31	146.71	24956		289 07:05:26	-173.72	15991		289 07:29:20	95.63	5456	
289 08:50:33	121.20	24957		289 08:46:40	160.98	15992		289 09:11:27	70.10	5457	
289 10:32:34	95.71	24958		289 10:27:55	135.66	15993		289 10:53:33	44.57	5458	
289 12:14:36	70.20	24959		289 12:09:10	110.34	15994		289 12:35:39	19.05	5459	
289 13:56:38	44.70	24960		289 13:50:24	85.04	15995		289 14:17:46	-6.48	5460	
289 15:38:40	19.19	24961		289 15:31:39	59.72	15996		289 15:59:52	-32.00	5461	
289 17:20:42	-6.32	24962		289 17:12:53	34.42	15997		289 17:41:58	-57.52	5462	
289 19:02:44	-31.83	24963		289 18:54:08	9.11	15998		289 19:24:05	-83.06	5463	
289 20:44:45	-57.32	24964		289 20:35:23	-16.21	15999		289 21:06:11	-108.58	5464	
289 22:26:47	-82.83	24965		289 22:16:37	-41.51	16000		289 22:48:17	-134.10	5465	
289 23:57:52	-66.83	24966		289 23:57:52	-66.83	16001					
290 00:08:49	-108.34	24966		290 01:39:06	-92.13	16002		290 00:30:24	-159.64	5466	
290 01:50:51	-133.84	24967		290 03:20:21	-117.45	16003		290 02:12:30	174.84	5467	
290 03:32:53	-159.35	24968		290 05:01:36	-142.77	16004		290 03:54:36	149.32	5468	
290 05:14:54	175.15	24969		290 06:42:50	-168.07	16005		290 05:36:43	123.79	5469	
290 06:56:56	149.65	24970		290 08:24:05	166.61	16006		290 07:18:49	98.27	5470	
290 08:38:58	124.14	24971		290 10:05:19	141.31	16007		290 09:00:55	72.75	5471	
290 10:21:00	98.63	24972		290 11:46:34	115.99	16008		290 10:43:02	47.21	5472	
290 12:03:02	73.12	24973		290 13:27:49	90.68	16009		290 12:25:08	21.69	5473	
290 13:45:04	47.62	24974		290 15:09:03	65.37	16010		290 14:07:14	-3.83	5474	
290 15:27:05	22.12	24975		290 16:50:18	40.06	16011		290 15:49:21	-29.37	5475	
290 17:09:07	-3.39	24976		290 18:31:32	14.75	16012		290 17:31:27	-54.89	5476	
290 18:51:09	-28.89	24977		290 20:12:47	-10.56	16013		290 19:13:33	-80.41	5477	
290 20:33:11	-54.40	24978		290 21:54:02	-35.88	16014		290 20:55:40	-105.94	5478	
290 22:15:13	-79.91	24979		290 23:35:16	-61.18	16015		290 22:37:46	-131.47	5479	
290 23:57:15	-105.42	24980									
291 01:39:16	-130.91	24981		291 01:16:31	-86.50	16016		291 00:19:52	-156.99	5480	
291 03:21:18	-156.42	24982		291 02:57:45	-111.80	16017		291 02:01:59	177.48	5481	
291 05:03:20	178.08	24983		291 04:39:00	-137.12	16018		291 03:44:05	151.96	5482	
291 06:45:22	152.57	24984		291 06:20:15	-162.44	16019		291 05:26:11	126.44	5483	
291 08:27:24	127.06	24985		291 08:01:29	172.26	16020		291 07:08:18	100.90	5484	
291 10:09:25	101.57	24986		291 09:42:44	146.94	16021		291 08:50:24	75.38	5485	
291 11:51:27	76.06	24987		291 11:23:58	121.64	16022		291 10:32:30	49.86	5486	
291 13:33:29	50.55	24988		291 13:05:13	96.32	16023		291 12:14:37	24.32	5487	
291 15:15:31	25.04	24989		291 14:46:28	71.01	16024		291 13:56:43	-1.20	5488	
291 16:57:33	-4.46	24990		291 16:27:42	45.70	16025		291 15:38:49	-26.72	5489	
291 18:39:35	-25.97	24991		291 18:08:57	20.39	16026		291 17:20:56	-52.25	5490	
291 20:21:36	-51.47	24992		291 19:50:11	-4.92	16027		291 19:03:02	-77.77	5491	
291 22:03:38	-76.97	24993		291 21:31:26	-30.23	16028		291 20:45:08	-103.30	5492	
291 23:45:40	-102.48	24994		291 23:12:41	-55.55	16029		291 22:27:15	-128.83	5493	

**SATELLITE C2**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

292 00:19:35	157.93	32956
292 02:04:27	131.59	32957
292 03:49:19	105.25	32958
292 05:34:11	78.91	32959
292 07:19:03	52.56	32960
292 09:03:55	26.22	32961
292 10:48:47	-12	32962
292 12:33:39	-26.46	32963
292 14:18:31	-52.81	32964
292 16:03:23	-79.15	32965
292 17:48:15	-105.49	32966
292 19:33:07	-131.83	32967
292 21:17:59	-158.18	32968
292 23:02:51	175.48	32969

**SATELLITE C3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

292 01:10:39	-165.12	26697
292 02:55:34	168.52	26698
292 04:40:29	142.17	26699
292 06:25:24	115.81	26700
292 08:10:19	89.45	26701
292 09:55:14	63.10	26702
292 11:40:09	36.74	26703
292 13:25:04	10.39	26704
292 15:10:00	-15.96	26705
292 16:54:55	-42.32	26706
292 18:39:50	-68.68	26707
292 20:24:45	-95.03	26708
292 22:09:40	-121.39	26709
292 23:54:35	-147.74	26710

**SATELLITE C4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

292 01:21:34	54.88	1462
292 03:06:28	28.53	1463
292 04:51:22	2.18	1464
292 06:36:16	-24.17	1465
292 08:21:10	-50.52	1466
292 10:06:04	-76.87	1467
292 11:50:58	-103.22	1468
292 13:35:52	-129.57	1469
292 15:20:46	-155.92	1470
292 17:05:40	177.73	1471
292 18:50:34	151.38	1472
292 20:35:28	125.03	1473
292 22:20:22	98.67	1474

293 00:47:43	149.14	32970
293 02:32:35	122.80	32971
293 04:17:27	96.45	32972
293 06:02:19	70.11	32973
293 07:47:11	43.77	32974
293 09:32:03	17.43	32975
293 11:16:55	-8.92	32976
293 13:01:47	-35.26	32977
293 14:46:39	-61.60	32978
293 16:31:31	-87.94	32979
293 18:16:23	-114.29	32980
293 20:01:15	-140.63	32981
293 21:46:07	-166.97	32982
293 23:30:59	166.69	32983

293 01:39:30	-174.10	26711
293 03:24:26	159.55	26712
293 05:09:21	133.19	26713
293 06:54:16	106.84	26714
293 08:39:11	80.48	26715
293 10:24:06	54.13	26716
293 12:09:01	27.77	26717
293 13:53:56	1.41	26718
293 15:38:51	-24.94	26719
293 17:23:47	-51.29	26720
293 19:08:42	-77.65	26721
293 20:53:37	-104.01	26722
293 22:38:32	-130.36	26723

293 00:05:16	72.32	1475
293 01:50:10	45.97	1476
293 03:35:04	19.62	1477
293 05:19:58	-6.73	1478
293 07:04:52	-33.08	1479
293 08:49:46	-59.43	1480
293 10:34:40	-85.78	1481
293 12:19:34	-112.13	1482
293 14:04:28	-138.48	1483
293 15:49:22	-164.83	1484
293 17:34:16	168.82	1485
293 19:19:10	142.47	1486
293 21:04:04	116.12	1487
293 22:48:58	89.77	1488

294 01:15:51	140.34	32984
294 03:00:43	114.00	32985
294 04:45:35	87.66	32986
294 06:30:27	61.32	32987
294 08:15:19	34.97	32988
294 10:00:11	8.63	32989
294 11:45:03	-17.71	32990
294 13:29:55	-44.05	32991
294 15:14:47	-70.40	32992
294 16:59:39	-96.74	32993
294 18:44:31	-123.08	32994
294 20:29:24	-149.42	32995
294 22:14:16	-175.76	32996
294 23:59:08	157.89	32997

294 00:23:27	-156.72	26724
294 02:08:22	176.93	26725
294 03:53:17	150.57	26726
294 05:38:13	124.22	26727
294 07:23:08	97.86	26728
294 09:08:03	71.51	26729
294 10:52:58	45.15	26730
294 12:37:53	18.80	26731
294 14:22:48	-7.56	26732
294 16:07:43	-33.91	26733
294 17:52:39	-60.27	26734
294 19:37:34	-86.62	26735
294 21:22:29	-112.98	26736
294 23:07:24	-139.33	26737

294 00:33:52	63.42	1489
294 02:18:46	37.07	1490
294 04:03:40	10.72	1491
294 05:48:34	-15.63	1492
294 07:33:28	-41.98	1493
294 09:18:22	-68.33	1494
294 11:03:16	-94.68	1495
294 12:48:10	-121.03	1496
294 14:33:04	-147.38	1497
294 16:17:58	-173.73	1498
294 18:02:52	159.92	1499
294 19:47:45	133.56	1500
294 21:32:39	107.21	1501
294 23:17:33	80.86	1502

295 01:44:00	131.55	32998
295 03:28:52	105.21	32999
295 05:13:44	78.87	33000
295 06:58:36	52.52	33001
295 08:43:28	26.18	33002
295 10:28:20	-16	33003
295 12:13:12	-26.50	33004
295 13:58:04	-52.85	33005
295 15:42:56	-79.19	33006
295 17:27:48	-105.53	33007
295 19:12:40	-131.87	33008
295 20:57:32	-158.22	33009
295 22:42:24	175.44	33010

295 00:52:19	-165.69	26738
295 02:37:14	167.95	26739
295 04:22:09	141.60	26740
295 06:07:04	115.24	26741
295 07:52:00	88.89	26742
295 09:36:55	62.53	26743
295 11:21:50	36.18	26744
295 13:06:45	9.82	26745
295 14:51:40	-16.53	26746
295 16:36:35	-42.89	26747
295 18:21:30	-69.24	26748
295 20:06:26	-95.60	26749
295 21:51:21	-121.95	26750
295 23:36:16	-148.31	26751

295 01:02:27	54.51	1503
295 02:47:21	28.16	1504
295 04:32:15	1.81	1505
295 06:17:09	-24.54	1506
295 08:02:03	-50.89	1507
295 09:46:57	-77.24	1508
295 11:31:51	-103.59	1509
295 13:16:45	-129.94	1510
295 15:01:39	-156.29	1511
295 16:46:33	177.36	1512
295 18:31:27	151.01	1513
295 20:16:21	124.66	1514
295 22:01:15	98.31	1515
295 23:46:09	71.96	1516

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT
day hr mn sc	deg	dg		day hr mn sc	deg	dg		day hr mn sc	deg	dg	
292 01:27:42	-127.99	24995		292 00:53:55	-80.85	16030		292 00:09:21	-154.35	5494	
292 03:09:44	-153.50	24996		292 02:35:10	-106.17	16031		292 01:51:27	-179.87	5495	
292 04:51:45	-178.99	24997		292 04:16:24	-131.47	16032		292 03:33:34	154.59	5496	
292 06:33:47	155.50	24998		292 05:57:39	-156.79	16033		292 05:15:40	129.07	5497	
292 08:15:49	129.99	24999		292 07:38:54	177.90	16034		292 06:57:46	103.55	5498	
292 09:57:51	104.49	25000		292 09:20:08	152.59	16035		292 08:39:53	78.02	5499	
292 11:39:53	78.98	25001		292 11:01:23	127.28	16036		292 10:21:59	52.49	5500	
292 13:21:55	53.47	25002		292 12:42:37	101.97	16037		292 12:04:05	26.97	5501	
292 15:03:56	27.98	25003		292 14:23:52	76.66	16038		292 13:46:12	1.44	5502	
292 16:45:58	2.47	25004		292 16:05:07	51.34	16039		292 15:28:18	-24.08	5503	
292 18:28:00	-23.04	25005		292 17:46:21	26.04	16040		292 17:10:24	-49.60	5504	
292 20:10:02	-48.55	25006		292 19:27:36	.72	16041		292 18:52:31	-75.14	5505	
292 21:52:04	-74.05	25007		292 21:08:50	-24.58	16042		292 20:34:37	-100.66	5506	
292 23:34:06	-99.56	25008		292 22:50:05	-49.90	16043		292 22:16:43	-126.18	5507	
								292 23:58:50	-151.72	5508	
293 01:16:07	-125.05	25009		293 00:31:20	-75.22	16044		293 01:40:56	-177.24	5509	
293 02:58:09	-150.56	25010		293 02:12:34	-100.52	16045		293 03:23:02	157.24	5510	
293 04:40:11	-176.07	25011		293 03:53:49	-125.84	16046		293 05:05:09	131.71	5511	
293 06:22:13	158.42	25012		293 05:35:03	-151.14	16047		293 06:47:15	106.19	5512	
293 08:04:15	132.92	25013		293 07:16:18	-176.46	16048		293 08:29:21	80.67	5513	
293 09:46:16	107.42	25014		293 08:57:33	158.23	16049		293 10:11:28	55.13	5514	
293 11:28:18	81.91	25015		293 10:38:47	132.92	16050		293 11:53:34	29.61	5515	
293 13:10:20	56.41	25016		293 12:20:02	107.61	16051		293 13:35:40	4.09	5516	
293 14:52:22	30.90	25017		293 14:01:16	82.30	16052		293 15:17:47	-21.45	5517	
293 16:34:24	5.39	25018		293 15:42:31	56.99	16053		293 16:59:53	-46.97	5518	
293 18:16:26	-20.12	25019		293 17:23:46	31.67	16054		293 18:41:59	-72.49	5519	
293 19:58:27	-45.61	25020		293 19:05:00	6.37	16055		293 20:24:06	-98.02	5520	
293 21:40:29	-71.12	25021		293 20:46:15	-18.95	16056		293 22:06:12	-123.55	5521	
293 23:22:31	-96.63	25022		293 22:27:29	-44.25	16057		293 23:48:18	-149.07	5522	
294 01:04:33	-122.13	25023		294 00:08:44	-69.57	16058		294 01:30:25	-174.60	5523	
294 02:46:35	-147.64	25024		294 01:49:59	-94.89	16059		294 03:12:31	159.88	5524	
294 04:28:37	-173.15	25025		294 03:31:13	-120.19	16060		294 04:54:37	134.36	5525	
294 06:10:38	161.36	25026		294 05:12:28	-145.51	16061		294 06:36:44	108.82	5526	
294 07:52:40	135.85	25027		294 06:53:42	-170.81	16062		294 08:18:50	83.30	5527	
294 09:34:42	110.34	25028		294 08:34:57	163.87	16063		294 10:00:56	57.78	5528	
294 11:16:44	84.83	25029		294 10:16:12	138.56	16064		294 11:43:03	32.24	5529	
294 12:58:46	59.33	25030		294 11:57:26	113.26	16065		294 13:25:09	6.72	5530	
294 14:40:47	33.83	25031		294 13:38:41	87.94	16066		294 15:07:15	-18.80	5531	
294 16:22:49	8.33	25032		294 15:19:55	62.64	16067		294 16:49:22	-44.33	5532	
294 18:04:51	-17.18	25033		294 17:01:10	37.32	16068		294 18:31:28	-69.85	5533	
294 19:46:53	-42.69	25034		294 18:42:25	12.00	16069		294 20:13:34	-95.37	5534	
294 21:28:55	-68.20	25035		294 20:23:39	-13.30	16070		294 21:55:41	-120.91	5535	
294 23:10:57	-93.71	25036		294 22:04:54	-38.62	16071		294 23:37:47	-146.43	5536	
				294 23:46:08	-63.92	16072					
295 00:52:58	-119.20	25037		295 01:27:23	-89.24	16073		295 01:19:53	-171.95	5537	
295 02:35:00	-144.71	25038		295 03:08:38	-114.55	16074		295 03:02:00	162.51	5538	
295 04:17:02	-170.21	25039		295 04:49:52	-139.86	16075		295 04:44:06	136.99	5539	
295 05:59:04	164.28	25040		295 06:31:07	-165.17	16076		295 06:26:12	111.47	5540	
295 07:41:06	138.77	25041		295 08:12:21	169.52	16077		295 08:08:19	85.94	5541	
295 09:23:08	113.26	25042		295 09:53:36	144.21	16078		295 09:50:25	60.42	5542	
295 11:05:09	87.77	25043		295 11:34:51	118.89	16079		295 11:32:31	34.89	5543	
295 12:47:11	62.26	25044		295 13:16:05	93.59	16080		295 13:14:38	9.36	5544	
295 14:29:13	36.75	25045		295 14:57:20	68.27	16081		295 14:56:44	-16.16	5545	
295 16:11:15	11.25	25046		295 16:38:34	42.97	16082		295 16:38:50	-41.68	5546	
295 17:53:17	-14.26	25047		295 18:19:49	17.65	16083		295 18:20:57	-67.22	5547	
295 19:35:18	-39.76	25048		295 20:01:04	-7.67	16084		295 20:03:03	-92.74	5548	
295 21:17:20	-65.26	25049		295 21:42:18	-32.97	16085		295 21:45:09	-118.26	5549	
295 22:59:22	-90.77	25050		295 23:23:33	-58.29	16086		295 23:27:16	-143.79	5550	

**SATELLITE C2**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

296 00:27:16	149.10	33011
296 02:12:08	122.76	33012
296 03:57:00	96.41	33013
296 05:41:52	70.07	33014
296 07:26:44	43.73	33015
296 09:11:36	17.39	33016
296 10:56:28	-8.96	33017
296 12:41:20	-35.30	33018
296 14:26:12	-61.64	33019
296 16:11:04	-87.98	33020
296 17:55:56	-114.33	33021
296 19:40:48	-140.67	33022
296 21:25:40	-167.01	33023
296 23:10:32	166.65	33024

**SATELLITE C3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

296 01:21:11	-174.66	26752
296 03:06:06	158.98	26753
296 04:51:01	132.63	26754
296 06:35:56	106.27	26755
296 08:20:52	79.92	26756
296 10:05:47	53.56	26757
296 11:50:42	27.21	26758
296 13:35:37	.85	26759
296 15:20:32	-25.51	26760
296 17:05:27	-51.86	26761
296 18:50:22	-78.22	26762
296 20:35:17	-104.57	26763
296 22:20:13	-130.93	26764

**SATELLITE C4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

296 01:31:03	45.61	1517
296 03:15:57	19.26	1518
296 05:00:51	-7.09	1519
296 06:45:45	-33.44	1520
296 08:30:39	-59.79	1521
296 10:15:33	-86.14	1522
296 12:00:27	-112.49	1523
296 13:45:21	-138.84	1524
296 15:30:15	-165.19	1525
296 17:15:09	168.46	1526
296 19:00:03	142.11	1527
296 20:44:57	115.76	1528
296 22:29:51	89.41	1529

297 00:55:24	140.30	33025
297 02:40:16	113.96	33026
297 04:25:08	87.62	33027
297 06:10:00	61.28	33028
297 07:54:52	34.94	33029
297 09:39:44	8.59	33030
297 11:24:36	-17.75	33031
297 13:09:28	-44.09	33032
297 14:54:20	-70.43	33033
297 16:39:12	-96.78	33034
297 18:24:04	-123.12	33035
297 20:08:56	-149.46	33036
297 21:53:48	-175.80	33037
297 23:38:40	157.85	33038

297 00:05:08	-157.28	26765
297 01:50:03	176.36	26766
297 03:34:58	150.01	26767
297 05:19:53	123.65	26768
297 07:04:48	97.30	26769
297 08:49:43	70.94	26770
297 10:34:39	44.59	26771
297 12:19:34	18.23	26772
297 14:04:29	-8.12	26773
297 15:49:24	-34.48	26774
297 17:34:19	-60.84	26775
297 19:19:14	-87.19	26776
297 21:04:09	-113.55	26777
297 22:49:05	-139.90	26778

297 00:14:45	63.06	1530
297 01:59:39	36.70	1531
297 03:44:33	10.35	1532
297 05:29:27	-16.00	1533
297 07:14:21	-42.35	1534
297 08:59:15	-68.70	1535
297 10:44:09	-95.05	1536
297 12:29:03	-121.40	1537
297 14:13:57	-147.75	1538
297 15:58:51	-174.10	1539
297 17:43:45	159.55	1540
297 19:28:39	133.20	1541
297 21:13:33	106.85	1542
297 22:58:26	80.50	1543

298 01:23:32	131.51	33039
298 03:08:24	105.17	33040
298 04:53:16	78.83	33041
298 06:38:08	52.48	33042
298 08:23:01	26.14	33043
298 10:07:53	-20	33044
298 11:52:45	-26.54	33045
298 13:37:37	-52.88	33046
298 15:22:29	-79.23	33047
298 17:07:21	-105.57	33048
298 18:52:13	-131.91	33049
298 20:37:05	-158.25	33050
298 22:21:57	175.40	33051

298 00:34:00	-166.26	26779
298 02:18:55	167.39	26780
298 04:03:50	141.03	26781
298 05:48:45	114.68	26782
298 07:33:40	88.32	26783
298 09:18:35	61.97	26784
298 11:03:31	35.61	26785
298 12:48:26	9.26	26786
298 14:33:21	-17.10	26787
298 16:18:16	-43.45	26788
298 18:03:11	-69.81	26789
298 19:48:06	-96.16	26790
298 21:33:01	-122.52	26791
298 23:17:57	-148.87	26792

298 00:43:20	54.15	1544
298 02:28:14	27.80	1545
298 04:13:08	1.45	1546
298 05:58:02	-24.90	1547
298 07:42:56	-51.25	1548
298 09:27:50	-77.60	1549
298 11:12:44	-103.95	1550
298 12:57:38	-130.30	1551
298 14:42:32	-156.65	1552
298 16:27:26	177.00	1553
298 18:12:20	150.64	1554
298 19:57:14	124.29	1555
298 21:42:08	97.94	1556
298 23:27:02	71.59	1557

299 00:06:49	149.06	33052
299 01:51:41	122.72	33053
299 03:36:33	96.38	33054
299 05:21:25	70.03	33055
299 07:06:17	43.69	33056
299 08:51:09	17.35	33057
299 10:36:01	-8.99	33058
299 12:20:53	-35.34	33059
299 14:05:45	-61.68	33060
299 15:50:37	-88.02	33061
299 17:35:29	-114.36	33062
299 19:20:21	-140.70	33063
299 21:05:13	-167.05	33064
299 22:50:05	166.61	33065

299 01:02:52	-175.23	26793
299 02:47:47	158.42	26794
299 04:32:42	132.06	26795
299 06:17:37	105.70	26796
299 08:02:32	79.35	26797
299 09:47:27	52.99	26798
299 11:32:23	26.64	26799
299 13:17:18	.28	26800
299 15:02:13	-26.07	26801
299 16:47:08	-52.43	26802
299 18:32:03	-78.78	26803
299 20:16:58	-105.14	26804
299 22:01:53	-131.49	26805
299 23:46:48	-157.85	26806

299 01:11:56	45.24	1558
299 02:56:50	18.89	1559
299 04:41:44	-7.46	1560
299 06:26:38	-33.81	1561
299 08:11:32	-60.16	1562
299 09:56:26	-86.51	1563
299 11:41:20	-112.86	1564
299 13:26:14	-139.21	1565
299 15:11:08	-165.56	1566
299 16:56:02	168.09	1567
299 18:40:56	141.74	1568
299 20:25:50	115.39	1569
299 22:10:44	89.04	1570
299 23:55:38	62.69	1571

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT
day	hr	mn	sc	day	hr	mn	sc	day	hr	mn	sc
deg	dg			deg	dg			deg	dg		
296 00:41:24	-116.28	25051	296 01:04:47	-83.59	16087	296 01:09:22	-169.32	5551			
296 02:23:26	-141.79	25052	296 02:46:02	-108.91	16088	296 02:51:28	165.16	5552			
296 04:05:28	-167.29	25053	296 04:27:17	-134.22	16089	296 04:33:35	139.63	5553			
296 05:47:29	167.21	25054	296 06:08:31	-159.53	16090	296 06:15:41	114.11	5554			
296 07:29:31	141.70	25055	296 07:49:46	175.16	16091	296 07:57:47	88.59	5555			
296 09:11:33	116.20	25056	296 09:31:00	149.85	16092	296 09:39:54	63.05	5556			
296 10:53:35	90.69	25057	296 11:12:15	124.54	16093	296 11:22:00	37.53	5557			
296 12:35:37	65.18	25058	296 12:53:30	99.22	16094	296 13:04:06	12.01	5558			
296 14:17:39	39.67	25059	296 14:34:44	73.92	16095	296 14:46:13	-13.53	5559			
296 15:59:40	14.18	25060	296 16:15:59	48.60	16096	296 16:28:19	-39.05	5560			
296 17:41:42	-11.33	25061	296 17:57:13	23.30	16097	296 18:10:25	-64.57	5561			
296 19:23:44	-36.83	25062	296 19:38:28	-2.02	16098	296 19:52:32	-90.10	5562			
296 21:05:46	-62.34	25063	296 21:19:43	-27.33	16099	296 21:34:38	-115.62	5563			
296 22:47:48	-87.85	25064	296 23:00:57	-52.64	16100	296 23:16:44	-141.15	5564			
297 00:29:49	-113.34	25065	297 00:42:12	-77.95	16101	297 00:58:51	-166.68	5565			
297 02:11:51	-138.85	25066	297 02:23:26	-103.26	16102	297 02:40:57	167.80	5566			
297 03:53:53	-164.36	25067	297 04:04:41	-128.57	16103	297 04:23:03	142.28	5567			
297 05:35:55	170.13	25068	297 05:45:56	-153.89	16104	297 06:05:10	116.74	5568			
297 07:17:57	144.63	25069	297 07:27:10	-179.19	16105	297 07:47:16	91.22	5569			
297 08:59:59	119.12	25070	297 09:08:25	155.49	16106	297 09:29:22	65.70	5570			
297 10:42:00	93.62	25071	297 10:49:39	130.19	16107	297 11:11:29	40.17	5571			
297 12:24:02	68.12	25072	297 12:30:54	104.87	16108	297 12:53:35	14.64	5572			
297 14:06:04	42.61	25073	297 14:12:09	79.55	16109	297 14:35:41	-10.88	5573			
297 15:48:06	17.10	25074	297 15:53:23	54.25	16110	297 16:17:48	-36.41	5574			
297 17:30:08	-8.41	25075	297 17:34:38	28.93	16111	297 17:59:54	-61.93	5575			
297 19:12:10	-33.91	25076	297 19:15:52	3.63	16112	297 19:42:00	-87.45	5576			
297 20:54:11	-59.41	25077	297 20:57:07	-21.69	16113	297 21:24:07	-112.99	5577			
297 22:36:13	-84.92	25078	297 22:38:22	-47.00	16114	297 23:06:13	-138.51	5578			
298 00:18:15	-110.42	25079	298 00:19:36	-72.31	16115	298 00:48:19	-164.03	5579			
298 02:00:17	-135.93	25080	298 02:00:51	-97.62	16116	298 02:30:26	170.43	5580			
298 03:42:19	-161.44	25081	298 03:42:05	-122.93	16117	298 04:12:32	144.91	5581			
298 05:24:21	173.05	25082	298 05:23:20	-148.24	16118	298 05:54:38	119.39	5582			
298 07:06:22	147.56	25083	298 07:04:35	-173.56	16119	298 07:36:45	93.86	5583			
298 08:48:24	122.05	25084	298 08:45:49	161.14	16120	298 09:18:51	68.34	5584			
298 10:30:26	96.55	25085	298 10:27:04	135.82	16121	298 11:00:57	42.81	5585			
298 12:12:28	71.04	25086	298 12:08:18	110.52	16122	298 12:43:04	17.28	5586			
298 13:54:30	45.53	25087	298 13:49:33	85.20	16123	298 14:25:10	-8.24	5587			
298 15:36:31	20.04	25088	298 15:30:48	59.89	16124	298 16:07:16	-33.76	5588			
298 17:18:33	-5.47	25089	298 17:12:02	34.58	16125	298 17:49:23	-59.30	5589			
298 19:00:35	-30.98	25090	298 18:53:17	9.27	16126	298 19:31:29	-84.82	5590			
298 20:42:37	-56.49	25091	298 20:34:31	-16.04	16127	298 21:13:35	-110.34	5591			
298 22:24:39	-81.99	25092	298 22:15:46	-41.35	16128	298 22:55:42	-135.87	5592			
			298 23:57:01	-66.67	16129						
299 00:06:41	-107.50	25093	299 01:38:15	-91.97	16130	299 00:37:48	-161.40	5593			
299 01:48:42	-133.00	25094	299 03:19:30	-117.29	16131	299 02:19:54	173.08	5594			
299 03:30:44	-158.50	25095	299 05:00:44	-142.59	16132	299 04:02:01	147.55	5595			
299 05:12:46	175.99	25096	299 06:41:59	-167.91	16133	299 05:44:07	122.03	5596			
299 06:54:48	150.48	25097	299 08:23:14	166.77	16134	299 07:26:13	96.51	5597			
299 08:36:50	124.97	25098	299 10:04:28	141.47	16135	299 09:08:20	70.97	5598			
299 10:18:52	99.47	25099	299 11:45:43	116.15	16136	299 10:50:26	45.45	5599			
299 12:00:53	73.97	25100	299 13:26:57	90.85	16137	299 12:32:32	19.93	5600			
299 13:42:55	48.46	25101	299 15:08:12	65.53	16138	299 14:14:39	-5.61	5601			
299 15:24:57	22.96	25102	299 16:49:27	40.22	16139	299 15:56:45	-31.13	5602			
299 17:06:59	-2.55	25103	299 18:30:41	14.91	16140	299 17:38:51	-56.65	5603			
299 18:49:01	-28.06	25104	299 20:11:56	-10.40	16141	299 19:20:58	-82.18	5604			
299 20:31:02	-53.55	25105	299 21:53:10	-35.71	16142	299 21:03:04	-107.70	5605			
299 22:13:04	-79.06	25106	299 23:34:25	-61.02	16143	299 22:45:10	-133.22	5606			
299 23:55:06	-104.57	25107									

**SATELLITE C2**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

300 00:34:57	140.27	33066
300 02:19:49	113.93	33067
300 04:04:41	87.58	33068
300 05:49:33	61.24	33069
300 07:34:25	34.90	33070
300 09:19:17	8.56	33071
300 11:04:09	-17.79	33072
300 12:49:01	-44.13	33073
300 14:33:53	-70.47	33074
300 16:18:45	-96.81	33075
300 18:03:37	-123.16	33076
300 19:48:29	-149.50	33077
300 21:33:21	-175.84	33078
300 23:18:13	157.82	33079

**SATELLITE C3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

300 01:31:44	175.80	26807
300 03:16:39	149.44	26808
300 05:01:34	123.09	26809
300 06:46:29	96.73	26810
300 08:31:24	70.37	26811
300 10:16:19	44.02	26812
300 12:01:14	17.66	26813
300 13:46:10	-8.69	26814
300 15:31:05	-35.05	26815
300 17:16:00	-61.40	26816
300 19:00:55	-87.76	26817
300 20:45:50	-114.11	26818
300 22:30:45	-140.47	26819

**SATELLITE C4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

300 01:40:32	36.34	1572
300 03:25:26	9.99	1573
300 05:10:20	-16.36	1574
300 06:55:14	-42.71	1575
300 08:40:08	-69.06	1576
300 10:25:02	-95.41	1577
300 12:09:56	-121.76	1578
300 13:54:50	-148.11	1579
300 15:39:44	-174.46	1580
300 17:24:38	159.19	1581
300 19:09:32	132.84	1582
300 20:54:26	106.49	1583
300 22:39:20	80.14	1584

301 01:03:05	131.47	33080
301 02:47:57	105.13	33081
301 04:32:49	78.79	33082
301 06:17:41	52.45	33083
301 08:02:33	26.10	33084
301 09:47:25	-24	33085
301 11:32:17	-26.58	33086
301 13:17:09	-52.92	33087
301 15:02:01	-79.27	33088
301 16:46:53	-105.61	33089
301 18:31:45	-131.95	33090
301 20:16:37	-158.29	33091
301 22:01:29	175.36	33092
301 23:46:21	149.02	33093

301 00:15:40	-166.82	26820
301 02:00:36	166.82	26821
301 03:45:31	140.47	26822
301 05:30:26	114.11	26823
301 07:15:21	87.76	26824
301 09:00:16	61.40	26825
301 10:45:11	35.04	26826
301 12:30:06	8.69	26827
301 14:15:02	-17.66	26828
301 15:59:57	-44.02	26829
301 17:44:52	-70.38	26830
301 19:29:47	-96.73	26831
301 21:14:42	-123.09	26832
301 22:59:37	-149.44	26833

301 00:24:14	53.79	1585
301 02:09:08	27.43	1586
301 03:54:02	1.08	1587
301 05:38:56	-25.27	1588
301 07:23:50	-51.62	1589
301 09:08:43	-77.97	1590
301 10:53:37	-104.32	1591
301 12:38:31	-130.67	1592
301 14:23:25	-157.02	1593
301 16:08:19	176.63	1594
301 17:53:13	150.28	1595
301 19:38:07	123.93	1596
301 21:23:01	97.58	1597
301 23:07:55	71.23	1598

302 01:31:13	122.68	33094
302 03:16:05	96.34	33095
302 05:00:57	70.00	33096
302 06:45:49	43.65	33097
302 08:30:41	17.31	33098
302 10:15:33	-9.03	33099
302 12:00:25	-35.37	33100
302 13:45:17	-61.72	33101
302 15:30:09	-88.06	33102
302 17:15:01	-114.40	33103
302 18:59:53	-140.74	33104
302 20:44:46	-167.08	33105
302 22:29:38	166.57	33106

302 00:44:32	-175.80	26834
302 02:29:28	157.85	26835
302 04:14:23	131.49	26836
302 05:59:18	105.14	26837
302 07:44:13	78.78	26838
302 09:29:08	52.43	26839
302 11:14:03	26.07	26840
302 12:58:58	-29	26841
302 14:43:54	-26.64	26842
302 16:28:49	-52.99	26843
302 18:13:44	-79.35	26844
302 19:58:39	-105.71	26845
302 21:43:34	-132.06	26846
302 23:28:29	-158.42	26847

302 00:52:49	44.88	1599
302 02:37:43	18.53	1600
302 04:22:37	-7.82	1601
302 06:07:31	-34.17	1602
302 07:52:25	-60.52	1603
302 09:37:19	-86.87	1604
302 11:22:13	-113.22	1605
302 13:07:07	-139.57	1606
302 14:52:01	-165.93	1607
302 16:36:55	167.72	1608
302 18:21:49	141.37	1609
302 20:06:43	115.02	1610
302 21:51:37	88.67	1611
302 23:36:31	62.32	1612

303 00:14:30	140.23	33107
303 01:59:22	113.89	33108
303 03:44:14	87.55	33109
303 05:29:06	61.20	33110
303 07:13:58	34.86	33111
303 08:58:50	8.52	33112
303 10:43:42	-17.82	33113
303 12:28:34	-44.17	33114
303 14:13:26	-70.51	33115
303 15:58:18	-96.85	33116
303 17:43:10	-123.19	33117
303 19:28:02	-149.53	33118
303 21:12:54	-175.88	33119
303 22:57:46	157.78	33120

303 01:13:24	175.23	26848
303 02:58:20	148.87	26849
303 04:43:15	122.52	26850
303 06:28:10	96.16	26851
303 08:13:05	69.81	26852
303 09:58:00	43.43	26853
303 11:42:55	17.10	26854
303 13:27:50	-9.26	26855
303 15:12:46	-35.61	26856
303 16:57:41	-61.97	26857
303 18:42:36	-88.32	26858
303 20:27:31	-114.68	26859
303 22:12:26	-141.04	26860
303 23:57:21	-167.39	26861

303 01:21:25	35.97	1613
303 03:06:19	9.62	1614
303 04:51:13	-16.73	1615
303 06:36:07	-43.08	1616
303 08:21:01	-69.43	1617
303 10:05:55	-95.78	1618
303 11:50:49	-122.13	1619
303 13:35:43	-148.48	1620
303 15:20:37	-174.83	1621
303 17:05:31	158.82	1622
303 18:50:25	132.47	1623
303 20:35:19	106.12	1624
303 22:20:13	79.77	1625

**SATELLITE S2**

**Ascending Node Predictions**  
**Predicting for 182 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

300 01:37:08	-130.07	25108
300 03:19:10	-155.58	25109
300 05:01:12	178.91	25110
300 06:43:13	153.42	25111
300 08:25:15	127.91	25112
300 10:07:17	102.40	25113
300 11:49:19	76.89	25114
300 13:31:21	51.39	25115
300 15:13:23	25.88	25116
300 16:55:24	.38	25117
300 18:37:26	-25.12	25118
300 20:19:28	-50.63	25119
300 22:01:30	-76.14	25120
300 23:43:32	-101.65	25121

**SATELLITE S3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

300 01:15:40	-86.34	16144
300 02:56:54	-111.64	16145
300 04:38:09	-136.96	16146
300 06:19:23	-162.26	16147
300 08:00:38	172.42	16148
300 09:41:53	147.11	16149
300 11:23:07	121.80	16150
300 13:04:22	96.49	16151
300 14:45:36	71.18	16152
300 16:26:51	45.87	16153
300 18:08:06	20.55	16154
300 19:49:20	-4.75	16155
300 21:30:35	-30.07	16156
300 23:11:50	-55.39	16157

**SATELLITE S4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

300 00:27:17	-158.76	5607
300 02:09:23	175.72	5608
300 03:51:29	150.20	5609
300 05:33:36	124.66	5610
300 07:15:42	99.14	5611
300 08:57:49	73.61	5612
300 10:39:55	48.09	5613
300 12:22:01	22.57	5614
300 14:04:08	-2.97	5615
300 15:46:14	-28.49	5616
300 17:28:20	-54.01	5617
300 19:10:27	-79.55	5618
300 20:52:33	-105.07	5619
300 22:34:39	-130.59	5620

301 01:25:34	-127.15	25122
301 03:07:35	-152.65	25123
301 04:49:37	-178.15	25124
301 06:31:39	156.34	25125
301 08:13:41	130.83	25126
301 09:55:43	105.32	25127
301 11:37:44	79.83	25128
301 13:19:46	54.32	25129
301 15:01:48	28.81	25130
301 16:43:50	3.31	25131
301 18:25:52	-22.20	25132
301 20:07:54	-47.71	25133
301 21:49:55	-73.20	25134
301 23:31:57	-98.71	25135

301 00:53:04	-80.69	16158
301 02:34:19	-106.01	16159
301 04:15:33	-131.31	16160
301 05:56:48	-156.63	16161
301 07:38:03	178.06	16162
301 09:19:17	152.75	16163
301 11:00:32	127.44	16164
301 12:41:46	102.13	16165
301 14:23:01	76.82	16166
301 16:04:16	51.50	16167
301 17:45:30	26.20	16168
301 19:26:45	.88	16169
301 21:07:59	-24.42	16170
301 22:49:14	-49.74	16171

301 00:16:46	-156.12	5621
301 01:58:52	178.36	5622
301 03:40:58	152.83	5623
301 05:23:05	127.30	5624
301 07:05:11	101.78	5625
301 08:47:17	76.26	5626
301 10:29:24	50.72	5627
301 12:11:30	25.20	5628
301 13:53:36	-.32	5629
301 15:35:43	-25.85	5630
301 17:17:49	-51.38	5631
301 18:59:55	-76.90	5632
301 20:42:02	-102.43	5633
301 22:24:08	-127.95	5634

302 01:13:59	-124.22	25136
302 02:56:01	-149.73	25137
302 04:38:03	-175.23	25138
302 06:20:05	159.26	25139
302 08:02:06	133.77	25140
302 09:44:08	108.26	25141
302 11:26:10	82.75	25142
302 13:08:12	57.24	25143
302 14:50:14	31.73	25144
302 16:32:16	6.23	25145
302 18:14:17	-19.27	25146
302 19:56:19	-44.77	25147
302 21:38:21	-70.28	25148
302 23:20:23	-95.79	25149

302 00:30:29	-75.05	16172
302 02:11:43	-100.36	16173
302 03:52:58	-125.67	16174
302 05:34:12	-150.98	16175
302 07:15:27	-176.29	16176
302 08:56:42	158.39	16177
302 10:37:56	133.09	16178
302 12:19:11	107.77	16179
302 14:00:25	82.47	16180
302 15:41:40	57.15	16181
302 17:22:55	31.83	16182
302 19:04:09	6.53	16183
302 20:45:24	-18.79	16184
302 22:26:38	-44.09	16185

302 00:06:14	-153.47	5635
302 01:48:21	-179.01	5636
302 03:30:27	155.47	5637
302 05:12:33	129.95	5638
302 06:54:40	104.41	5639
302 08:36:46	78.89	5640
302 10:18:52	53.37	5641
302 12:00:59	27.84	5642
302 13:43:05	2.32	5643
302 15:25:11	-23.21	5644
302 17:07:18	-48.74	5645
302 18:49:24	-74.26	5646
302 20:31:30	-99.78	5647
302 22:13:37	-125.32	5648
302 23:55:43	-150.84	5649

303 01:02:25	-121.30	25150
303 02:44:26	-146.79	25151
303 04:26:28	-172.30	25152
303 06:08:30	162.19	25153
303 07:50:32	136.69	25154
303 09:32:34	111.18	25155
303 11:14:36	85.67	25156
303 12:56:37	60.18	25157
303 14:38:39	34.67	25158
303 16:20:41	9.16	25159
303 18:02:43	-16.35	25160
303 19:44:45	-41.85	25161
303 21:26:47	-67.36	25162
303 23:08:48	-92.85	25163

303 00:07:53	-69.41	16186
303 01:49:08	-94.72	16187
303 03:30:22	-120.03	16188
303 05:11:37	-145.34	16189
303 06:52:51	-170.65	16190
303 08:34:06	164.04	16191
303 10:15:21	138.72	16192
303 11:56:35	113.42	16193
303 13:37:50	88.10	16194
303 15:19:04	62.80	16195
303 17:00:19	37.48	16196
303 18:41:34	12.17	16197
303 20:22:48	-13.14	16198
303 22:04:03	-38.45	16199
303 23:45:17	-63.76	16200

303 01:37:49	-176.36	5650
303 03:19:56	158.11	5651
303 05:02:02	132.58	5652
303 06:44:08	107.06	5653
303 08:26:15	81.53	5654
303 10:08:21	56.01	5655
303 11:50:27	30.49	5656
303 13:32:34	4.95	5657
303 15:14:40	-20.57	5658
303 16:56:46	-46.09	5659
303 18:38:53	-71.62	5660
303 20:20:59	-97.15	5661
303 22:03:05	-122.67	5662
303 23:45:12	-148.20	5663

SATELLITE C2				SATELLITE C3				SATELLITE C4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 183 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT	
day hr mn sc	deg dg			day hr mn sc	deg dg			day hr mn sc	deg dg		
304 00:42:38	131.44	33121		304 01:42:16	166.25	26862		304 00:05:07	53.42	1626	
304 02:27:30	105.10	33122		304 03:27:12	139.90	26863		304 01:50:01	27.07	1627	
304 04:12:22	78.75	33123		304 05:12:07	113.54	26864		304 03:34:55	.72	1628	
304 05:57:14	52.41	33124		304 06:57:02	87.19	26865		304 05:19:49	-25.63	1629	
304 07:42:06	26.07	33125		304 08:41:57	60.83	26866		304 07:04:43	-51.98	1630	
304 09:26:58	-.27	33126		304 10:26:52	34.48	26867		304 08:49:37	-78.33	1631	
304 11:11:50	-26.62	33127		304 12:11:47	8.12	26868		304 10:34:31	-104.68	1632	
304 12:56:42	-52.96	33128		304 13:56:43	-18.23	26869		304 12:19:25	-131.03	1633	
304 14:41:34	-79.30	33129		304 15:41:38	-44.59	26870		304 14:04:19	-157.38	1634	
304 16:26:26	-105.64	33130		304 17:26:33	-70.94	26871		304 15:49:13	176.27	1635	
304 18:11:18	-131.99	33131		304 19:11:28	-97.30	26872		304 17:34:07	149.92	1636	
304 19:56:10	-158.33	33132		304 20:56:23	-123.65	26873		304 19:19:01	123.56	1637	
304 21:41:02	175.33	33133		304 22:41:18	-150.01	26874		304 21:03:55	97.21	1638	
304 23:25:54	148.99	33134						304 22:48:49	70.86	1639	
305 01:10:46	122.64	33135		305 00:26:13	-176.37	26875		305 00:33:43	44.51	1640	
305 02:55:38	96.30	33136		305 02:11:09	157.28	26876		305 02:18:37	18.16	1641	
305 04:40:30	69.96	33137		305 03:56:04	130.93	26877		305 04:03:31	-8.19	1642	
305 06:25:22	43.62	33138		305 05:40:59	104.57	26878		305 05:48:25	-34.54	1643	
305 08:10:14	17.27	33139		305 07:25:54	78.21	26879		305 07:33:19	-60.89	1644	
305 09:55:06	-9.07	33140		305 09:10:49	51.86	26880		305 09:18:12	-87.24	1645	
305 11:39:58	-35.41	33141		305 10:55:44	25.50	26881		305 11:03:06	-113.59	1646	
305 13:24:50	-61.75	33142		305 12:40:39	-.85	26882		305 12:48:00	-139.94	1647	
305 15:09:42	-88.09	33143		305 14:25:35	-27.21	26883		305 14:32:54	-166.29	1648	
305 16:54:34	-114.44	33144		305 16:10:30	-53.56	26884		305 16:17:48	167.36	1649	
305 18:39:26	-140.78	33145		305 17:55:25	-79.92	26885		305 18:02:42	141.01	1650	
305 20:24:18	-167.12	33146		305 19:40:20	-106.27	26886		305 19:47:36	114.66	1651	
305 22:09:10	166.54	33147		305 21:25:15	-132.63	26887		305 21:32:30	88.31	1652	
305 23:54:02	140.19	33148		305 23:10:10	-158.98	26888		305 23:17:24	61.96	1653	
306 01:38:54	113.85	33149		306 00:55:05	174.66	26889		306 01:02:18	35.61	1654	
306 03:23:46	87.51	33150		306 02:40:01	148.31	26890		306 02:47:12	9.26	1655	
306 05:08:38	61.17	33151		306 04:24:56	121.95	26891		306 04:32:06	-17.09	1656	
306 06:53:30	34.82	33152		306 06:09:51	95.60	26892		306 06:17:09	-43.45	1657	
306 08:38:22	8.48	33153		306 07:54:46	69.24	26893		306 08:01:54	-69.80	1658	
306 10:23:14	-17.86	33154		306 09:39:41	42.88	26894		306 09:46:48	-96.15	1659	
306 12:08:06	-44.20	33155		306 11:24:36	16.53	26895		306 11:31:42	-122.50	1660	
306 13:52:58	-70.55	33156		306 13:09:31	-9.83	26896		306 13:16:36	-148.85	1661	
306 15:37:50	-96.89	33157		306 14:54:27	-36.18	26897		306 15:01:30	-175.20	1662	
306 17:22:42	-123.23	33158		306 16:39:22	-62.54	26898		306 16:46:24	158.45	1663	
306 19:07:34	-149.57	33159		306 18:24:17	-88.89	26899		306 18:31:18	132.10	1664	
306 20:52:26	-175.92	33160		306 20:09:12	-115.25	26900		306 20:16:12	105.75	1665	
306 22:37:18	157.74	33161		306 21:54:07	-141.60	26901		306 22:01:06	79.40	1666	
				306 23:39:02	-167.96	26902		306 23:46:00	53.05	1667	
307 00:22:10	131.40	33162		307 01:23:57	165.69	26903		307 01:30:54	26.70	1668	
307 02:07:02	105.06	33163		307 03:08:53	139.33	26904		307 03:15:48	.35	1669	
307 03:51:54	78.72	33164		307 04:53:48	112.98	26905		307 05:00:42	-26.00	1670	
307 05:36:46	52.37	33165		307 06:38:43	86.62	26906		307 06:45:36	-52.35	1671	
307 07:21:38	26.03	33166		307 08:23:38	60.27	26907		307 08:30:30	-78.70	1672	
307 09:06:30	-.31	33167		307 10:08:33	33.91	26908		307 10:15:24	-105.05	1673	
307 10:51:22	-26.65	33168		307 11:53:28	7.55	26909		307 12:00:18	-131.40	1674	
307 12:36:14	-53.00	33169		307 13:38:24	-18.80	26910		307 13:45:12	-157.75	1675	
307 14:21:06	-79.34	33170		307 15:23:19	-45.15	26911		307 15:30:06	175.90	1676	
307 16:05:58	-105.68	33171		307 17:08:14	-71.51	26912		307 17:15:00	149.55	1677	
307 17:50:50	-132.02	33172		307 18:53:09	-97.87	26913		307 18:59:54	123.20	1678	
307 19:35:42	-158.37	33173		307 20:38:04	-124.22	26914		307 20:44:48	96.85	1679	
307 21:20:34	175.29	33174		307 22:22:59	-150.58	26915		307 22:29:42	70.50	1680	
307 23:05:26	148.95	33175									

SATELLITE S2							SATELLITE S3							SATELLITE S4								
Ascending Node Predictions							Ascending Node Predictions							Ascending Node Predictions								
Predicting for 182 days							Predicting for 183 days							Predicting for 183 days								
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg	day	hr	mn	sc	
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc	
304 00:50:00	-112.36	25164	304 01:26:32	-89.07	16201	304 01:27:18	-173.72	5664														
304 02:32:52	-143.87	25165	304 03:07:47	-114.39	16202	304 03:09:24	160.76	5665														
304 04:14:54	-169.38	25166	304 04:49:01	-139.69	16203	304 04:51:31	135.22	5666														
304 05:56:56	165.12	25167	304 06:30:16	-165.01	16204	304 06:33:37	109.70	5667														
304 07:38:58	139.61	25168	304 08:11:30	169.69	16205	304 08:15:43	84.18	5668														
304 09:20:59	114.11	25169	304 09:52:45	144.37	16206	304 09:57:50	58.64	5669														
304 11:03:01	88.61	25170	304 11:34:00	119.05	16207	304 11:39:56	33.12	5670														
304 12:45:03	63.10	25171	304 13:15:14	93.75	16208	304 13:22:02	7.60	5671														
304 14:27:05	37.59	25172	304 14:56:29	68.43	16209	304 15:04:09	-17.93	5672														
304 16:09:07	12.08	25173	304 16:37:43	43.13	16210	304 16:46:15	-43.45	5673														
304 17:51:09	-13.42	25174	304 18:18:58	17.81	16211	304 18:28:21	-68.98	5674														
304 19:33:10	-38.92	25175	304 20:00:13	-7.50	16212	304 20:10:28	-94.51	5675														
304 21:15:12	-64.43	25176	304 21:41:27	-32.81	16213	304 21:52:34	-120.03	5676														
304 22:57:14	-89.93	25177	304 23:22:42	-58.12	16214	304 23:34:40	-145.55	5677														
305 00:39:16	-115.44	25178	305 01:03:56	-83.43	16215	305 01:16:47	-171.09	5678														
305 02:21:18	-140.95	25179	305 02:45:11	-108.74	16216	305 02:58:53	163.39	5679														
305 04:03:19	-166.44	25180	305 04:26:26	-134.06	16217	305 04:40:59	137.87	5680														
305 05:45:21	168.05	25181	305 06:07:40	-159.36	16218	305 06:23:06	112.34	5681														
305 07:27:23	142.54	25182	305 07:48:55	175.32	16219	305 08:05:12	86.81	5682														
305 09:09:25	117.04	25183	305 09:30:10	150.01	16220	305 09:47:18	61.29	5683														
305 10:51:27	91.53	25184	305 11:11:24	124.70	16221	305 11:29:25	35.76	5684														
305 12:33:29	66.02	25185	305 12:52:39	99.39	16222	305 13:11:31	10.24	5685														
305 14:15:30	40.53	25186	305 14:33:53	74.08	16223	305 14:53:37	-15.28	5686														
305 15:57:32	15.02	25187	305 16:15:08	48.77	16224	305 16:35:44	-40.82	5687														
305 17:39:34	-10.49	25188	305 17:56:23	23.45	16225	305 18:17:50	-66.34	5688														
305 19:21:36	-36.00	25189	305 19:37:37	-1.85	16226	305 19:59:56	-91.86	5689														
305 21:03:38	-61.50	25190	305 21:18:52	-27.17	16227	305 21:42:03	-117.40	5690														
305 22:45:40	-87.01	25191	305 23:00:06	-52.47	16228	305 23:24:09	-142.92	5691														
306 00:27:41	-112.51	25192	306 00:41:21	-77.79	16229	306 01:06:15	-168.44	5692														
306 02:09:43	-138.01	25193	306 02:22:36	-103.11	16230	306 02:48:22	166.03	5693														
306 03:51:45	-163.52	25194	306 04:03:50	-128.41	16231	306 04:30:28	140.51	5694														
306 05:33:47	170.97	25195	306 05:45:05	-153.73	16232	306 06:12:35	114.97	5695														
306 07:15:49	145.46	25196	306 07:26:19	-179.03	16233	306 07:54:41	89.45	5696														
306 08:57:51	119.96	25197	306 09:07:34	155.65	16234	306 09:36:47	63.93	5697														
306 10:39:52	94.46	25198	306 10:48:49	130.34	16235	306 11:18:54	38.39	5698														
306 12:21:54	68.96	25199	306 12:30:03	105.03	16236	306 13:01:00	12.87	5699														
306 14:03:56	43.45	25200	306 14:11:18	79.72	16237	306 14:43:06	-12.65	5700														
306 15:45:58	17.94	25201	306 15:52:32	54.41	16238	306 16:25:13	-38.18	5701														
306 17:28:00	-7.57	25202	306 17:33:47	29.10	16239	306 18:07:19	-63.70	5702														
306 19:10:02	-33.07	25203	306 19:15:02	3.78	16240	306 19:49:25	-89.22	5703														
306 20:52:03	-58.57	25204	306 20:56:16	-21.52	16241	306 21:31:32	-119.76	5704														
306 22:34:05	-84.08	25205	306 22:37:31	-46.84	16242	306 23:13:38	-140.28	5705														
307 00:16:07	-109.58	25206	307 00:18:45	-72.14	16243	307 00:55:44	-165.80	5706														
307 01:58:09	-135.09	25207	307 02:00:00	-97.46	16244	307 02:37:51	168.66	5707														
307 03:40:11	-160.60	25208	307 03:41:15	-122.77	16245	307 04:19:57	143.14	5708														
307 05:22:13	173.89	25209	307 05:22:29	-148.08	16246	307 06:02:03	117.62	5709														
307 07:04:14	148.40	25210	307 07:03:44	-173.39	16247	307 07:44:10	92.09	5710														
307 08:46:16	122.89	25211	307 08:44:58	161.30	16248	307 09:26:16	66.57	5711														
307 10:28:18	97.38	25212	307 10:26:13	135.99	16249	307 11:08:22	41.04	5712														
307 12:10:20	71.88	25213	307 12:07:28	110.67	16250	307 12:50:29	15.51	5713														
307 13:52:22	46.37	25214	307 13:48:42	85.37	16251	307 14:32:35	-10.01	5714														
307 15:34:23	20.88	25215	307 15:29:57	60.05	16252	307 16:14:41	-35.53	5715														
307 17:16:25	-4.63	25216	307 17:11:11	34.75	16253	307 17:56:48	-61.07	5716														
307 18:58:27	-30.14	25217	307 18:52:26	9.43	16254	307 19:38:54	-86.59	5717														
307 20:40:29	-55.65	25218	307 20:33:41	-15.89	16255	307 21:21:00	-112.11	5718														
307 22:22:31	-81.15	25219	307 22:14:55	-41.19	16256	307 23:03:07	-137.64	5719														
			307 23:56:10	-66.51	16257																	

SATELLITE C2						SATELLITE C3						SATELLITE C4					
Ascending Node Predictions						Ascending Node Predictions						Ascending Node Predictions					
Predicting for 183 days						Predicting for 183 days						Predicting for 183 days					
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg
308 00:50:18	122.61	33176		308 00:07:54	-176.93	26916		308 00:14:36	44.15	1681							
308 02:35:10	96.26	33177		308 01:52:50	156.71	26917		308 01:59:30	17.80	1682							
308 04:20:02	69.92	33178		308 03:37:45	130.36	26918		308 03:44:24	-8.55	1683							
308 06:04:54	43.58	33179		308 05:22:40	104.00	26919		308 05:29:18	-34.91	1684							
308 07:49:46	17.24	33180		308 07:07:35	77.65	26920		308 07:14:12	-61.26	1685							
308 09:34:38	-9.10	33181		308 08:52:30	51.29	26921		308 08:59:06	-87.61	1686							
308 11:19:30	-35.45	33182		308 10:37:25	24.94	26922		308 10:44:00	-113.96	1687							
308 13:04:22	-61.79	33183		308 12:22:20	-1.42	26923		308 12:28:54	-140.31	1688							
308 14:49:14	-88.13	33184		308 14:07:16	-27.77	26924		308 14:13:48	-166.66	1689							
308 16:34:06	-114.47	33185		308 15:52:11	-54.13	26925		308 15:58:42	166.99	1690							
308 18:18:58	-140.82	33186		308 17:37:06	-80.48	26926		308 17:43:36	140.64	1691							
308 20:03:50	-167.16	33187		308 19:22:01	-106.84	26927		308 19:28:30	114.29	1692							
308 21:48:42	166.50	33188		308 21:06:56	-133.20	26928		308 21:13:24	87.94	1693							
308 23:33:34	140.16	33189		308 22:51:51	-159.55	26929		308 22:58:18	61.59	1694							
309 01:18:26	113.81	33190		309 00:36:46	174.09	26930		309 00:43:12	35.24	1695							
309 03:03:18	87.47	33191		309 02:21:42	147.74	26931		309 02:28:06	8.89	1696							
309 04:48:10	61.13	33192		309 04:06:37	121.38	26932		309 04:13:00	-17.46	1697							
309 06:33:02	34.79	33193		309 05:51:32	95.03	26933		309 05:57:54	-43.81	1698							
309 08:17:54	8.44	33194		309 07:36:27	68.67	26934		309 07:42:48	-70.16	1699							
309 10:02:46	-17.90	33195		309 09:21:22	42.32	26935		309 09:27:42	-96.51	1700							
309 11:47:38	-44.24	33196		309 11:06:17	15.96	26936		309 11:12:36	-122.86	1701							
309 13:32:30	-70.58	33197		309 12:51:13	-10.39	26937		309 12:57:30	-149.21	1702							
309 15:17:22	-96.93	33198		309 14:36:08	-36.75	26938		309 14:42:24	-175.56	1703							
309 17:02:14	-123.27	33199		309 16:21:03	-63.10	26939		309 16:27:18	158.09	1704							
309 18:47:06	-149.61	33200		309 18:05:58	-89.46	26940		309 18:12:12	131.74	1705							
309 20:31:58	-175.95	33201		309 19:50:53	-115.82	26941		309 19:57:06	105.39	1706							
309 22:16:50	157.71	33202		309 21:35:48	-142.17	26942		309 21:42:00	79.04	1707							
				309 23:20:43	-168.53	26943		309 23:26:54	52.69	1708							
310 00:01:42	131.36	33203		310 01:05:39	165.12	26944		310 01:11:48	26.34	1709							
310 01:46:34	105.02	33204		310 02:50:34	138.76	26945		310 02:56:42	-0.02	1710							
310 03:31:26	78.68	33205		310 04:35:29	112.41	26946		310 04:41:36	-26.37	1711							
310 05:16:18	52.34	33206		310 06:20:24	86.05	26947		310 06:26:30	-52.72	1712							
310 07:01:10	25.99	33207		310 08:05:19	59.70	26948		310 08:11:24	-79.07	1713							
310 08:46:03	-3.35	33208		310 09:50:14	33.34	26949		310 09:56:18	-105.42	1714							
310 10:30:55	-26.69	33209		310 11:35:09	6.99	26950		310 11:41:12	-131.77	1715							
310 12:15:47	-53.03	33210		310 13:20:05	-19.37	26951		310 13:26:06	-158.12	1716							
310 14:00:39	-79.37	33211		310 15:05:00	-45.72	26952		310 15:11:00	175.53	1717							
310 15:45:31	-105.72	33212		310 16:49:55	-72.08	26953		310 16:55:53	149.18	1718							
310 17:30:23	-132.06	33213		310 18:34:50	-98.43	26954		310 18:40:47	122.83	1719							
310 19:15:15	-158.40	33214		310 20:19:45	-124.79	26955		310 20:25:41	96.48	1720							
310 21:00:07	175.26	33215		310 22:04:40	-151.15	26956		310 22:10:35	70.13	1721							
310 22:44:59	148.92	33216		310 23:49:36	-177.50	26957		310 23:55:29	43.78	1722							
311 00:29:51	122.57	33217		311 01:34:31	156.15	26958		311 01:40:23	17.43	1723							
311 02:14:43	96.23	33218		311 03:19:26	129.79	26959		311 03:25:17	-8.92	1724							
311 03:59:35	69.89	33219		311 05:04:21	103.43	26960		311 05:10:11	-35.27	1725							
311 05:44:27	43.55	33220		311 06:49:16	77.08	26961		311 06:55:05	-61.62	1726							
311 07:29:19	17.20	33221		311 08:34:11	50.72	26962		311 08:39:59	-87.97	1727							
311 09:14:11	-9.14	33222		311 10:19:06	24.37	26963		311 10:24:53	-114.32	1728							
311 10:59:03	-35.48	33223		311 12:04:02	-1.99	26964		311 12:09:47	-140.68	1729							
311 12:43:55	-61.82	33224		311 13:48:57	-28.34	26965		311 13:54:41	-167.03	1730							
311 14:28:47	-88.17	33225		311 15:33:52	-54.70	26966		311 15:39:35	166.62	1731							
311 16:13:39	-114.51	33226		311 17:18:47	-81.05	26967		311 17:24:29	140.27	1732							
311 17:58:31	-140.85	33227		311 19:03:42	-107.41	26968		311 19:09:23	113.92	1733							
311 19:43:23	-167.19	33228		311 20:48:37	-133.76	26969		311 20:54:17	87.57	1734							
311 21:28:15	166.46	33229		311 22:33:32	-160.12	26970		311 22:39:11	61.22	1735							
311 23:13:07	140.12	33230															

West longitude is negative (-)

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT	
day hr mn sc	deg dg			day hr mn sc	deg dg			day hr mn sc	deg dg		
308 00:04:33	-106.66	25220		308 01:37:24	-91.81	16258		308 00:45:13	-163.17	5720	
308 01:46:34	-132.16	25221		308 03:18:39	-117.13	16259		308 02:27:19	171.31	5721	
308 03:28:36	-157.66	25222		308 04:59:54	-142.44	16260		308 04:09:26	145.78	5722	
308 05:10:38	176.83	25223		308 06:41:08	-167.75	16261		308 05:51:32	120.26	5723	
308 06:52:40	151.32	25224		308 08:22:23	166.94	16262		308 07:33:38	94.74	5724	
308 08:34:42	125.81	25225		308 10:03:37	141.63	16263		308 09:15:45	69.20	5725	
308 10:16:44	100.31	25226		308 11:44:52	116.32	16264		308 10:57:51	43.68	5726	
308 11:58:45	74.81	25227		308 13:26:07	91.00	16265		308 12:39:57	18.16	5727	
308 13:40:47	49.30	25228		308 15:07:21	65.70	16266		308 14:22:04	-7.38	5728	
308 15:22:49	23.80	25229		308 16:48:36	40.38	16267		308 16:04:10	-32.90	5729	
308 17:04:51	-1.71	25230		308 18:29:51	15.07	16268		308 17:46:16	-58.42	5730	
308 18:46:53	-27.22	25231		308 20:11:05	-10.24	16269		308 19:28:23	-83.95	5731	
308 20:28:55	-52.73	25232		308 21:52:20	-35.55	16270		308 21:10:29	-109.47	5732	
308 22:10:56	-78.22	25233		308 23:33:34	-60.86	16271		308 22:52:35	-134.99	5733	
308 23:52:58	-103.73	25234									
309 01:35:00	-129.23	25235		309 01:14:49	-86.17	16272		309 00:34:42	-160.53	5734	
309 03:17:02	-154.74	25236		309 02:56:04	-111.49	16273		309 02:16:48	173.95	5735	
309 04:59:04	179.75	25237		309 04:37:18	-136.79	16274		309 03:58:54	148.43	5736	
309 06:41:06	154.24	25238		309 06:18:33	-162.11	16275		309 05:41:01	122.89	5737	
309 08:23:07	128.75	25239		309 07:59:47	172.59	16276		309 07:23:07	97.37	5738	
309 10:05:09	103.24	25240		309 09:41:02	147.27	16277		309 09:05:13	71.85	5739	
309 11:47:11	77.73	25241		309 11:22:17	121.95	16278		309 10:47:20	46.32	5740	
309 13:29:13	52.23	25242		309 13:03:31	96.65	16279		309 12:29:26	20.80	5741	
309 15:11:15	26.72	25243		309 14:44:46	71.33	16280		309 14:11:32	-4.73	5742	
309 16:53:17	1.21	25244		309 16:26:00	46.03	16281		309 15:53:39	-30.26	5743	
309 18:35:18	-24.28	25245		309 18:07:15	20.71	16282		309 17:35:45	-55.78	5744	
309 20:17:20	-49.79	25246		309 19:48:30	-4.60	16283		309 19:17:51	-81.30	5745	
309 21:59:22	-75.30	25247		309 21:29:44	-29.91	16284		309 20:59:58	-106.84	5746	
309 23:41:24	-100.81	25248		309 23:10:59	-55.22	16285		309 22:42:04	-132.36	5747	
310 01:23:26	-126.31	25249		310 00:52:13	-80.52	16286		310 00:24:10	-157.88	5748	
310 03:05:28	-151.82	25250		310 02:33:28	-105.84	16287		310 02:06:17	176.59	5749	
310 04:47:29	-177.31	25251		310 04:14:43	-131.16	16288		310 03:48:23	151.06	5750	
310 06:29:31	157.18	25252		310 05:55:57	-156.46	16289		310 05:30:29	125.54	5751	
310 08:11:33	131.67	25253		310 07:37:12	178.22	16290		310 07:12:36	100.01	5752	
310 09:53:35	106.16	25254		310 09:18:26	152.92	16291		310 08:54:42	74.49	5753	
310 11:35:37	80.66	25255		310 10:59:41	127.60	16292		310 10:36:48	48.97	5754	
310 13:17:38	55.16	25256		310 12:40:56	102.29	16293		310 12:18:55	23.43	5755	
310 14:59:40	29.65	25257		310 14:22:10	76.98	16294		310 14:01:01	-2.09	5756	
310 16:41:42	4.15	25258		310 16:03:25	51.67	16295		310 15:43:07	-27.61	5757	
310 18:23:44	-21.36	25259		310 17:44:39	26.36	16296		310 17:25:14	-53.15	5758	
310 20:05:46	-46.87	25260		310 19:25:54	1.05	16297		310 19:07:20	-78.67	5759	
310 21:47:48	-72.38	25261		310 21:07:09	-24.27	16298		310 20:49:26	-104.19	5760	
310 23:29:49	-97.87	25262		310 22:48:23	-49.57	16299		310 22:31:33	-129.72	5761	
311 01:11:51	-123.38	25263		311 00:29:38	-74.89	16300		311 00:13:39	-155.24	5762	
311 02:53:53	-148.88	25264		311 02:10:52	-100.19	16301		311 01:55:46	179.22	5763	
311 04:35:55	-174.39	25265		311 03:52:07	-125.51	16302		311 03:37:52	153.70	5764	
311 06:17:57	160.10	25266		311 05:33:22	-150.83	16303		311 05:19:58	128.18	5765	
311 07:59:59	134.59	25267		311 07:14:36	-176.13	16304		311 07:02:05	102.64	5766	
311 09:42:00	109.10	25268		311 08:55:51	158.55	16305		311 08:44:11	77.12	5767	
311 11:24:02	83.59	25269		311 10:37:06	133.24	16306		311 10:26:17	51.60	5768	
311 13:06:04	58.08	25270		311 12:18:20	107.94	16307		311 12:08:24	26.07	5769	
311 14:48:06	32.58	25271		311 13:59:35	82.62	16308		311 13:50:30	.55	5770	
311 16:30:08	7.07	25272		311 15:40:49	57.32	16309		311 15:32:36	-24.97	5771	
311 18:12:10	-18.44	25273		311 17:22:04	32.00	16310		311 17:14:43	-50.51	5772	
311 19:54:11	-43.93	25274		311 19:03:19	6.68	16311		311 18:56:49	-76.03	5773	
311 21:36:13	-69.44	25275		311 20:44:33	-18.62	16312		311 20:38:55	-101.55	5774	
311 23:18:15	-94.95	25276		311 22:25:48	-43.94	16313		311 22:21:02	-127.09	5775	

**SATELLITE C2**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG ORBIT**  
**day hr mn sc**    **deg dg**

312 00:57:59	113.78	33231
312 02:42:51	87.44	33232
312 04:27:43	61.10	33233
312 06:12:35	34.75	33234
312 07:57:27	8.41	33235
312 09:42:19	-17.93	33236
312 11:27:11	-44.27	33237
312 13:12:03	-70.62	33238
312 14:56:55	-96.96	33239
312 16:41:47	-123.30	33240
312 18:26:39	-149.64	33241
312 20:11:31	-175.99	33242
312 21:56:23	-157.67	33243
312 23:41:15	131.33	33244

**SATELLITE C3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG ORBIT**  
**day hr mn sc**    **deg dg**

312 00:18:28	173.53	26971
312 02:03:23	147.17	26972
312 03:48:18	120.81	26973
312 05:33:13	94.46	26974
312 07:18:08	68.10	26975
312 09:03:03	41.75	26976
312 10:47:59	15.39	26977
312 12:32:54	-10.96	26978
312 14:17:49	-37.32	26979
312 16:02:44	-63.67	26980
312 17:47:39	-90.03	26981
312 19:32:34	-116.38	26982
312 21:17:29	-142.74	26983
312 23:02:25	-169.09	26984

**SATELLITE C4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG ORBIT**  
**day hr mn sc**    **deg dg**

312 00:24:05	34.87	1736
312 02:08:59	8.52	1737
312 03:53:53	-17.83	1738
312 05:38:47	-44.18	1739
312 07:23:41	-70.53	1740
312 09:08:35	-96.88	1741
312 10:53:29	-123.23	1742
312 12:38:23	-149.58	1743
312 14:23:17	-175.93	1744
312 16:08:11	157.72	1745
312 17:53:05	131.37	1746
312 19:37:59	105.02	1747
312 21:22:53	78.67	1748
312 23:07:47	52.32	1749

313 01:26:07	104.99	33245
313 03:10:59	78.64	33246
313 04:55:51	52.30	33247
313 06:40:43	25.96	33248
313 08:25:35	-38	33249
313 10:10:27	-26.72	33250
313 11:55:19	-53.07	33251
313 13:40:11	-79.41	33252
313 15:25:03	-105.75	33253
313 17:09:55	-132.09	33254
313 18:54:47	-158.44	33255
313 20:39:39	175.22	33256
313 22:24:31	148.88	33257

313 00:47:20	164.55	26985
313 02:32:15	138.20	26986
313 04:17:10	111.84	26987
313 06:02:05	85.48	26988
313 07:47:00	59.13	26989
313 09:31:55	32.77	26990
313 11:16:51	6.42	26991
313 13:01:46	-19.94	26992
313 14:46:41	-46.29	26993
313 16:31:36	-72.65	26994
313 18:16:31	-99.00	26995
313 20:01:26	-125.36	26996
313 21:46:22	-151.71	26997
313 23:31:17	-178.07	26998

313 00:52:41	25.97	1750
313 02:37:35	-38	1751
313 04:22:29	-26.73	1752
313 06:07:23	-53.09	1753
313 07:52:17	-79.44	1754
313 09:37:11	-105.79	1755
313 11:22:05	-132.14	1756
313 13:06:59	-158.49	1757
313 14:51:53	175.16	1758
313 16:36:47	148.81	1759
313 18:21:41	122.46	1760
313 20:06:35	96.11	1761
313 21:51:29	69.76	1762
313 23:36:23	43.41	1763

314 00:09:23	122.54	33258
314 01:54:15	96.19	33259
314 03:39:07	69.85	33260
314 05:23:59	43.51	33261
314 07:08:51	17.17	33262
314 08:53:43	-9.17	33263
314 10:38:35	-35.52	33264
314 12:23:27	-61.86	33265
314 14:08:19	-88.20	33266
314 15:53:11	-114.54	33267
314 17:38:03	-140.89	33268
314 19:22:55	-167.23	33269
314 21:07:47	166.43	33270
314 22:52:39	140.09	33271

314 01:16:12	155.58	26999
314 03:01:07	129.22	27000
314 04:46:02	102.86	27001
314 06:30:57	76.51	27002
314 08:15:52	50.15	27003
314 10:00:48	23.80	27004
314 11:45:43	-2.56	27005
314 13:30:38	-28.91	27006
314 15:15:33	-55.27	27007
314 17:00:28	-81.62	27008
314 18:45:23	-107.98	27009
314 20:30:19	-134.33	27010
314 22:15:14	-160.69	27011

314 01:21:17	17.06	1764
314 03:06:11	-9.29	1765
314 04:51:05	-35.64	1766
314 06:35:59	-61.99	1767
314 08:20:53	-88.34	1768
314 10:05:47	-114.69	1769
314 11:50:41	-141.04	1770
314 13:35:35	-167.39	1771
314 15:20:29	166.26	1772
314 17:05:23	139.91	1773
314 18:50:17	113.56	1774
314 20:35:11	87.21	1775
314 22:20:05	60.86	1776

315 00:37:31	113.74	33272
315 02:22:23	87.40	33273
315 04:07:15	61.06	33274
315 05:52:07	34.72	33275
315 07:36:59	8.37	33276
315 09:21:51	-17.97	33277
315 11:06:43	-44.31	33278
315 12:51:35	-70.65	33279
315 14:36:27	-96.99	33280
315 16:21:19	-123.34	33281
315 18:06:11	-149.68	33282
315 19:51:02	-176.02	33283
315 21:35:55	157.64	33284
315 23:20:47	131.29	33285

315 00:00:09	172.96	27012
315 01:45:04	146.60	27013
315 03:29:59	120.25	27014
315 05:14:54	93.89	27015
315 06:59:49	67.53	27016
315 08:44:45	41.18	27017
315 10:29:40	14.82	27018
315 12:14:35	-11.53	27019
315 13:59:30	-37.89	27020
315 15:44:25	-64.24	27021
315 17:29:20	-90.60	27022
315 19:14:16	-116.95	27023
315 20:59:11	-143.31	27024
315 22:44:06	-169.66	27025

315 00:04:59	34.50	1777
315 01:49:53	8.15	1778
315 03:34:47	-18.20	1779
315 05:19:41	-44.55	1780
315 07:04:35	-70.90	1781
315 08:49:29	-97.25	1782
315 10:34:23	-123.60	1783
315 12:19:17	-149.95	1784
315 14:04:11	-176.30	1785
315 15:49:05	157.35	1786
315 17:33:59	131.00	1787
315 19:18:53	104.65	1788
315 21:03:47	78.30	1789
315 22:48:41	51.95	1790

**SATELLITE S2**

**Ascending Node Predictions**  
**Predicting for 182 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

312 01:00:17	-120.46	25277
312 02:42:19	-145.96	25278
312 04:24:21	-171.47	25279
312 06:06:22	163.04	25280
312 07:48:24	137.53	25281
312 09:30:26	112.02	25282
312 11:12:28	86.51	25283
312 12:54:30	61.01	25284
312 14:36:32	35.50	25285
312 16:18:33	10.00	25286
312 18:00:35	-15.50	25287
312 19:42:37	-41.01	25288
312 21:24:39	-66.52	25289
312 23:06:41	-92.03	25290

**SATELLITE S3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

312 00:07:02	-69.24	16314
312 01:48:17	-94.56	16315
312 03:29:32	-119.87	16316
312 05:10:46	-145.18	16317
312 06:52:01	-170.49	16318
312 08:33:15	164.20	16319
312 10:14:30	138.89	16320
312 11:55:45	113.57	16321
312 13:36:59	88.27	16322
312 15:18:14	62.95	16323
312 16:59:28	37.65	16324
312 18:40:43	12.33	16325
312 20:21:58	-12.98	16326
312 22:03:12	-38.29	16327
312 23:44:27	-63.60	16328

**SATELLITE S4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

312 00:03:08	-152.61	5776
312 01:45:14	-178.13	5777
312 03:27:21	156.34	5778
312 05:09:27	130.82	5779
312 06:51:33	105.29	5780
312 08:33:40	79.76	5781
312 10:15:46	54.24	5782
312 11:57:52	28.72	5783
312 13:39:59	3.18	5784
312 15:22:05	-22.34	5785
312 17:04:11	-47.86	5786
312 18:46:18	-73.39	5787
312 20:28:24	-98.92	5788
312 22:10:30	-124.44	5789
312 23:52:37	-149.97	5790

313 00:48:43	-117.53	25291
313 02:30:44	-143.03	25292
313 04:12:46	-168.53	25293
313 05:54:48	165.96	25294
313 07:36:50	140.45	25295
313 09:18:52	114.94	25296
313 11:00:54	89.44	25297
313 12:42:55	63.94	25298
313 14:24:57	38.43	25299
313 16:06:59	12.93	25300
313 17:49:01	-12.58	25301
313 19:31:03	-38.09	25302
313 21:13:05	-63.60	25303
313 22:55:06	-89.09	25304

313 01:25:41	-88.91	16329
313 03:06:56	-114.22	16330
313 04:48:11	-139.54	16331
313 06:29:25	-164.84	16332
313 08:10:40	169.84	16333
313 09:51:54	144.54	16334
313 11:33:09	119.22	16335
313 13:14:24	93.90	16336
313 14:55:38	68.60	16337
313 16:36:53	43.28	16338
313 18:18:07	17.98	16339
313 19:59:22	-7.34	16340
313 21:40:37	-32.65	16341
313 23:21:51	-57.96	16342

313 01:34:43	-175.49	5791
313 03:16:49	158.99	5792
313 04:58:56	133.45	5793
313 06:41:02	107.93	5794
313 08:23:08	82.41	5795
313 10:05:15	56.87	5796
313 11:47:21	31.35	5797
313 13:29:27	5.83	5798
313 15:11:34	-19.70	5799
313 16:53:40	-45.22	5800
313 18:35:46	-70.74	5801
313 20:17:53	-96.28	5802
313 21:59:59	-121.80	5803
313 23:42:05	-147.32	5804

314 00:37:08	-114.60	25305
314 02:19:10	-140.11	25306
314 04:01:12	-165.61	25307
314 05:43:14	168.88	25308
314 07:25:16	143.37	25309
314 09:07:17	117.88	25310
314 10:49:19	92.37	25311
314 12:31:21	66.86	25312
314 14:13:23	41.36	25313
314 15:55:25	15.85	25314
314 17:37:27	-9.66	25315
314 19:19:28	-35.15	25316
314 21:01:30	-60.66	25317
314 22:43:32	-86.17	25318

314 01:03:06	-83.27	16343
314 02:44:21	-108.59	16344
314 04:25:35	-133.89	16345
314 06:06:50	-159.21	16346
314 07:48:04	175.49	16347
314 09:29:19	150.17	16348
314 11:10:34	124.86	16349
314 12:51:48	99.55	16350
314 14:33:03	74.24	16351
314 16:14:17	48.93	16352
314 17:55:32	23.62	16353
314 19:36:47	-1.70	16354
314 21:18:01	-27.00	16355
314 22:59:16	-52.32	16356

314 01:24:12	-172.86	5805
314 03:06:18	161.62	5806
314 04:48:24	136.10	5807
314 06:30:31	110.57	5808
314 08:12:37	85.05	5809
314 09:54:43	59.52	5810
314 11:36:50	33.99	5811
314 13:18:56	8.47	5812
314 15:01:02	-17.05	5813
314 16:43:09	-42.59	5814
314 18:25:15	-68.11	5815
314 20:07:21	-93.63	5816
314 21:49:28	-119.16	5817
314 23:31:34	-144.69	5818

315 00:25:34	-111.68	25319
315 02:07:36	-137.18	25320
315 03:49:38	-162.69	25321
315 05:31:39	171.82	25322
315 07:13:41	146.31	25323
315 08:55:43	120.80	25324
315 10:37:45	95.29	25325
315 12:19:47	69.79	25326
315 14:01:49	44.28	25327
315 15:43:50	18.78	25328
315 17:25:52	-6.72	25329
315 19:07:54	-32.23	25330
315 20:49:56	-57.74	25331
315 22:31:58	-83.25	25332

315 00:40:30	-77.62	16357
315 02:21:45	-102.94	16358
315 04:03:00	-128.26	16359
315 05:44:14	-153.56	16360
315 07:25:29	-178.88	16361
315 09:06:43	155.82	16362
315 10:47:58	130.50	16363
315 12:29:13	105.19	16364
315 14:10:27	79.88	16365
315 15:51:42	54.57	16366
315 17:32:56	29.26	16367
315 19:14:11	3.95	16368
315 20:55:26	-21.37	16369
315 22:36:40	-46.67	16370

315 01:13:40	-170.21	5819
315 02:55:47	164.26	5820
315 04:37:53	138.74	5821
315 06:19:59	113.22	5822
315 08:02:06	87.68	5823
315 09:44:12	62.16	5824
315 11:26:19	36.63	5825
315 13:08:25	11.10	5826
315 14:50:31	-14.42	5827
315 16:32:38	-39.95	5828
315 18:14:44	-65.47	5829
315 19:56:50	-90.99	5830
315 21:38:57	-116.53	5831
315 23:21:03	-142.05	5832

SATELLITE C2							SATELLITE C3							SATELLITE C4							
Ascending Node Predictions							Ascending Node Predictions							Ascending Node Predictions							
Predicting for 183 days							Predicting for 183 days							Predicting for 183 days							
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg	day	hr	mn	sc
316 01:05:39	104.95	33286		316 00:29:01	163.98	27026		316 00:33:35	25.60	1791											
316 02:50:31	78.61	33287		316 02:13:56	137.63	27027		316 02:18:29	-7.75	1792											
316 04:35:23	52.27	33288		316 03:58:51	111.27	27028		316 04:03:23	-27.10	1793											
316 06:20:15	25.92	33289		316 05:43:46	84.91	27029		316 05:48:17	-53.45	1794											
316 08:05:07	-42	33290		316 07:28:42	58.56	27030		316 07:33:11	-79.80	1795											
316 09:49:59	-26.76	33291		316 09:13:37	32.21	27031		316 09:18:05	-106.15	1796											
316 11:34:51	-53.10	33292		316 10:58:32	5.85	27032		316 11:02:59	-132.50	1797											
316 13:19:43	-79.44	33293		316 12:43:27	-20.51	27033		316 12:47:53	-158.85	1798											
316 15:04:35	-105.79	33294		316 14:28:22	-46.86	27034		316 14:32:47	174.80	1799											
316 16:49:27	-132.13	33295		316 16:13:17	-73.22	27035		316 16:17:41	148.44	1800											
316 18:34:19	-158.47	33296		316 17:58:12	-99.57	27036		316 18:02:35	122.09	1801											
316 20:19:11	175.19	33297		316 19:43:08	-125.93	27037		316 19:47:29	95.74	1802											
316 22:04:03	148.84	33298		316 21:28:03	-152.28	27038		316 21:32:23	69.39	1803											
316 23:48:55	122.50	33299		316 23:12:58	-178.64	27039		316 23:17:17	43.04	1804											
317 01:33:47	96.16	33300		317 00:57:53	155.01	27040		317 01:02:11	16.69	1805											
317 03:18:39	69.82	33301		317 02:42:48	128.65	27041		317 02:47:05	-9.66	1806											
317 05:03:31	43.47	33302		317 04:27:43	102.30	27042		317 04:31:59	-36.01	1807											
317 06:48:23	17.13	33303		317 06:12:39	75.94	27043		317 06:16:53	-62.36	1808											
317 08:33:15	-9.21	33304		317 07:57:34	49.59	27044		317 08:01:47	-88.71	1809											
317 10:18:07	-35.55	33305		317 09:42:29	23.23	27045		317 09:46:41	-115.06	1810											
317 12:02:59	-61.89	33306		317 11:27:24	-3.12	27046		317 11:31:35	-141.41	1811											
317 13:47:51	-88.24	33307		317 13:12:19	-29.48	27047		317 13:16:29	-167.76	1812											
317 15:32:43	-114.58	33308		317 14:57:14	-55.84	27048		317 15:01:23	165.89	1813											
317 17:17:35	-140.92	33309		317 16:42:09	-82.19	27049		317 16:46:17	139.54	1814											
317 19:02:27	-167.26	33310		317 18:27:05	-108.55	27050		317 18:31:11	113.19	1815											
317 20:47:19	166.39	33311		317 20:12:00	-134.90	27051		317 20:16:05	86.84	1816											
317 22:32:11	140.05	33312		317 21:56:55	-161.26	27052		317 22:00:59	60.49	1817											
				317 23:41:50	172.39	27053		317 23:45:53	34.14	1818											
318 00:17:03	113.71	33313		318 01:26:45	146.03	27054		318 01:30:47	7.79	1819											
318 02:01:55	87.37	33314		318 03:11:40	119.68	27055		318 03:15:41	-18.56	1820											
318 03:46:47	61.02	33315		318 04:56:36	93.32	27056		318 05:00:35	-44.91	1821											
318 05:31:39	34.68	33316		318 06:41:31	66.97	27057		318 06:45:29	-71.27	1822											
318 07:16:31	8.34	33317		318 08:26:26	40.61	27058		318 08:30:23	-97.62	1823											
318 09:01:23	-18.00	33318		318 10:11:21	14.26	27059		318 10:15:17	-123.97	1824											
318 10:46:15	-44.35	33319		318 11:56:16	-12.10	27060		318 12:00:11	-150.32	1825											
318 12:31:07	-70.69	33320		318 13:41:11	-38.46	27061		318 13:45:05	-176.67	1826											
318 14:15:59	-97.03	33321		318 15:26:06	-64.81	27062		318 15:29:59	156.98	1827											
318 16:00:51	-123.37	33322		318 17:11:02	-91.16	27063		318 17:14:53	130.63	1828											
318 17:45:43	-149.71	33323		318 18:55:57	-117.52	27064		318 18:59:47	104.28	1829											
318 19:30:35	-176.06	33324		318 20:40:52	-143.88	27065		318 20:44:41	77.93	1830											
318 21:15:27	157.60	33325		318 22:25:47	-170.23	27066		318 22:29:35	51.58	1831											
318 23:00:19	131.26	33326																			
319 00:45:11	104.92	33327		319 00:10:42	163.41	27067		319 00:14:29	25.23	1832											
319 02:30:03	78.57	33328		319 01:55:37	137.06	27068		319 01:59:23	-1.12	1833											
319 04:14:55	52.23	33329		319 03:40:33	110.70	27069		319 03:44:17	-27.47	1834											
319 05:59:47	25.89	33330		319 05:25:28	84.35	27070		319 05:29:11	-53.82	1835											
319 07:44:39	-45	33331		319 07:10:23	57.99	27071		319 07:14:05	-80.17	1836											
319 09:29:31	-26.80	33332		319 08:55:18	31.64	27072		319 08:58:59	-106.52	1837											
319 11:14:23	-53.14	33333		319 10:40:13	5.28	27073		319 10:43:53	-132.87	1838											
319 12:59:15	-79.48	33334		319 12:25:08	-21.08	27074		319 12:28:47	-159.22	1839											
319 14:44:07	-105.82	33335		319 14:10:03	-47.43	27075		319 14:13:41	174.43	1840											
319 16:28:59	-132.16	33336		319 15:54:59	-73.78	27076		319 15:58:35	148.08	1841											
319 18:13:51	-158.51	33337		319 17:39:54	-100.14	27077		319 17:43:29	121.73	1842											
319 19:58:43	175.15	33338		319 19:24:49	-126.50	27078		319 19:28:23	95.38	1843											
319 21:43:35	148.81	33339		319 21:09:44	-152.85	27079		319 21:13:17	69.02	1844											
319 23:28:27	122.47	33340		319 22:54:39	-179.21	27080		319 22:58:11	42.67	1845											

West longitude is negative (-)

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT
day	hr	mn	sc	day	hr	mn	sc	day	hr	mn	sc
deg	dg			deg	dg			deg	dg		
316 00:14:00	-108.75	25333	316 00:17:55	-71.99	16371	316 01:03:09	-167.57	5833			
316 01:56:01	-134.25	25334	316 01:59:09	-97.29	16372	316 02:45:16	166.90	5834			
316 03:38:03	-159.75	25335	316 03:40:24	-122.61	16373	316 04:27:22	141.37	5835			
316 05:20:05	174.74	25336	316 05:21:39	-147.92	16374	316 06:09:28	115.85	5836			
316 07:02:07	149.23	25337	316 07:02:53	-173.23	16375	316 07:51:35	90.32	5837			
316 08:44:09	123.72	25338	316 08:44:08	161.46	16376	316 09:33:41	64.80	5838			
316 10:26:11	98.22	25339	316 10:25:23	136.14	16377	316 11:15:47	39.28	5839			
316 12:08:12	72.72	25340	316 12:06:37	110.84	16378	316 12:57:54	13.74	5840			
316 13:50:14	47.21	25341	316 13:47:52	85.52	16379	316 14:40:00	-11.78	5841			
316 15:32:16	21.71	25342	316 15:29:06	60.22	16380	316 16:22:06	-37.30	5842			
316 17:14:18	-3.80	25343	316 17:10:21	34.90	16381	316 18:04:13	-62.84	5843			
316 18:56:20	-29.31	25344	316 18:51:36	9.58	16382	316 19:46:19	-88.36	5844			
316 20:38:22	-54.82	25345	316 20:32:50	-15.72	16383	316 21:28:25	-113.88	5845			
316 22:20:23	-80.31	25346	316 22:14:05	-41.04	16384	316 23:10:32	-139.41	5846			
			316 23:55:19	-66.34	16385						
317 00:02:25	-105.82	25347	317 01:36:34	-91.66	16386	317 00:52:38	-164.93	5847			
317 01:44:27	-131.32	25348	317 03:17:49	-116.97	16387	317 02:34:44	169.54	5848			
317 03:26:29	-156.83	25349	317 04:59:03	-142.27	16388	317 04:16:51	144.01	5849			
317 05:08:31	177.66	25350	317 06:40:18	-167.59	16389	317 05:58:57	118.49	5850			
317 06:50:33	152.15	25351	317 08:21:32	167.11	16390	317 07:41:03	92.97	5851			
317 08:32:34	126.66	25352	317 10:02:47	141.79	16391	317 09:23:10	67.43	5852			
317 10:14:36	101.15	25353	317 11:44:02	116.47	16392	317 11:05:16	41.91	5853			
317 11:56:38	75.64	25354	317 13:25:16	91.17	16393	317 12:47:22	16.39	5854			
317 13:38:40	50.14	25355	317 15:06:31	65.85	16394	317 14:29:29	-9.14	5855			
317 15:20:42	24.63	25356	317 16:47:45	40.55	16395	317 16:11:35	-34.67	5856			
317 17:02:44	-88	25357	317 18:29:00	15.23	16396	317 17:53:41	-60.19	5857			
317 18:44:45	-26.37	25358	317 20:10:15	-10.08	16397	317 19:35:48	-85.72	5858			
317 20:26:47	-51.88	25359	317 21:51:29	-35.39	16398	317 21:17:54	-111.24	5859			
317 22:08:49	-77.39	25360	317 23:32:44	-60.70	16399	317 23:00:00	-136.76	5860			
317 23:50:51	-102.90	25361									
318 01:32:53	-128.40	25362	318 01:13:58	-86.01	16400	318 00:42:07	-162.30	5861			
318 03:14:55	-153.91	25363	318 02:55:13	-111.32	16401	318 02:24:13	172.18	5862			
318 04:56:56	-179.40	25364	318 04:36:28	-136.64	16402	318 04:06:19	146.66	5863			
318 06:38:58	155.09	25365	318 06:17:42	-161.94	16403	318 05:48:26	121.13	5864			
318 08:21:00	129.58	25366	318 07:58:57	172.74	16404	318 07:30:32	95.60	5865			
318 10:03:02	104.07	25367	318 09:40:11	147.44	16405	318 09:12:38	70.08	5866			
318 11:45:04	78.57	25368	318 11:21:26	122.12	16406	318 10:54:45	44.55	5867			
318 13:27:06	53.06	25369	318 13:02:41	96.80	16407	318 12:36:51	19.03	5868			
318 15:09:07	27.56	25370	318 14:43:55	71.50	16408	318 14:18:57	-6.49	5869			
318 16:51:09	2.06	25371	318 16:25:10	46.19	16409	318 16:01:04	-32.03	5870			
318 18:33:11	-23.45	25372	318 18:06:24	20.88	16410	318 17:43:10	-57.55	5871			
318 20:15:13	-48.96	25373	318 19:47:39	-4.43	16411	318 19:25:16	-83.07	5872			
318 21:57:15	-74.47	25374	318 21:28:54	-29.75	16412	318 21:07:23	-108.61	5873			
318 23:39:17	-99.97	25375	318 23:10:08	-55.05	16413	318 22:49:29	-134.13	5874			
319 01:21:18	-125.47	25376	319 00:51:23	-80.37	16414	319 00:31:35	-159.65	5875			
319 03:03:20	-150.97	25377	319 02:32:38	-105.69	16415	319 02:13:42	174.82	5876			
319 04:45:22	-176.48	25378	319 04:13:52	-130.99	16416	319 03:55:48	149.30	5877			
319 06:27:24	158.01	25379	319 05:55:07	-156.31	16417	319 05:37:54	123.77	5878			
319 08:09:26	132.50	25380	319 07:36:21	178.39	16418	319 07:20:01	98.24	5879			
319 09:51:28	107.00	25381	319 09:17:36	153.07	16419	319 09:02:07	72.72	5880			
319 11:33:29	81.50	25382	319 10:58:51	127.76	16420	319 10:44:13	47.20	5881			
319 13:15:31	55.99	25383	319 12:40:05	102.45	16421	319 12:26:20	21.66	5882			
319 14:57:33	30.49	25384	319 14:21:20	77.14	16422	319 14:08:26	-3.86	5883			
319 16:39:35	4.98	25385	319 16:02:34	51.83	16423	319 15:50:32	-29.38	5884			
319 18:21:37	-20.53	25386	319 17:43:49	26.52	16424	319 17:32:39	-54.91	5885			
319 20:03:39	-46.04	25387	319 19:25:04	1.20	16425	319 19:14:45	-80.44	5886			
319 21:45:40	-71.53	25388	319 21:06:18	-24.10	16426	319 20:56:51	-105.96	5887			
319 23:27:42	-97.04	25389	319 22:47:33	-49.42	16427	319 22:38:58	-131.49	5888			

**SATELLITE C2**
**Ascending Node Predictions**

Predicting for 183 days

 TIME (GMT) E LONG ORBIT  
 day hr mn sc deg dg

320	01	13	:19	96.12	33341
320	02	58	:11	69.78	33342
320	04	43	:03	43.44	33343
320	06	27	:55	17.10	33344
320	08	12	:47	-9.25	33345
320	09	57	:39	-35.59	33346
320	11	42	:31	-61.93	33347
320	13	27	:23	-88.27	33348
320	15	12	:15	-114.61	33349
320	16	57	:07	-140.96	33350
320	18	41	:59	-167.30	33351
320	20	26	:51	166.36	33352
320	22	11	:43	140.02	33353
320	23	56	:35	113.67	33354

**SATELLITE C3**
**Ascending Node Predictions**

Predicting for 183 days

 TIME (GMT) E LONG ORBIT  
 day hr mn sc deg dg

320	00	39	:34	154.44	27081
320	02	24	:30	128.08	27082
320	04	09	:25	101.73	27083
320	05	54	:20	75.37	27084
320	07	39	:15	49.02	27085
320	09	24	:10	22.66	27086
320	11	09	:05	-3.69	27087
320	12	54	:00	-30.05	27088
320	14	38	:56	-56.40	27089
320	16	23	:51	-82.76	27090
320	18	08	:46	-109.12	27091
320	19	53	:41	-135.47	27092
320	21	38	:36	-161.83	27093
320	23	23	:31	171.82	27094

**SATELLITE C4**
**Ascending Node Predictions**

Predicting for 183 days

 TIME (GMT) E LONG ORBIT  
 day hr mn sc deg dg

320	00	43	:05	16.32	1846
320	02	27	:59	-10.03	1847
320	04	12	:53	-36.38	1848
320	05	57	:47	-62.73	1849
320	07	42	:41	-89.08	1850
320	09	27	:35	-115.43	1851
320	11	12	:29	-141.78	1852
320	12	57	:23	-168.13	1853
320	14	42	:17	165.52	1854
320	16	27	:11	139.17	1855
320	18	12	:05	112.82	1856
320	19	56	:59	86.47	1857
320	21	41	:53	60.12	1858
320	23	26	:47	33.77	1859

321	01	41	:27	87.33	33355
321	03	26	:19	60.99	33356
321	05	11	:11	34.65	33357
321	06	56	:03	8.30	33358
321	08	40	:55	-18.04	33359
321	10	25	:47	-44.38	33360
321	12	10	:39	-70.72	33361
321	13	55	:31	-97.06	33362
321	15	40	:23	-123.41	33363
321	17	25	:15	-149.75	33364
321	19	10	:07	-176.09	33365
321	20	54	:59	157.57	33366
321	22	39	:51	131.22	33367

321	01	08	:27	145.46	27095
321	02	53	:22	119.11	27096
321	04	38	:17	92.75	27097
321	06	23	:12	66.40	27098
321	08	08	:07	40.04	27099
321	09	53	:02	13.69	27100
321	11	37	:58	-12.67	27101
321	13	22	:53	-39.02	27102
321	15	07	:48	-65.38	27103
321	16	52	:43	-91.73	27104
321	18	37	:38	-118.09	27105
321	20	22	:33	-144.45	27106
321	22	07	:28	-170.80	27107
321	23	52	:24	162.84	27108

321	01	11	:41	7.42	1860
321	02	56	:35	-18.93	1861
321	04	41	:29	-45.28	1862
321	06	26	:23	-71.63	1863
321	08	11	:17	-97.99	1864
321	09	56	:11	-124.34	1865
321	11	41	:05	-150.69	1866
321	13	25	:59	-177.04	1867
321	15	10	:53	156.61	1868
321	16	55	:47	130.26	1869
321	18	40	:41	103.91	1870
321	20	25	:35	77.56	1871
321	22	10	:29	51.21	1872
321	23	55	:23	24.86	1873

322	00	24	:43	104.88	33368
322	02	09	:35	78.54	33369
322	03	54	:27	52.20	33370
322	05	39	:19	25.85	33371
322	07	24	:11	-4.49	33372
322	09	09	:03	-26.83	33373
322	10	53	:55	-53.17	33374
322	12	38	:47	-79.51	33375
322	14	23	:39	-105.86	33376
322	16	08	:31	-132.20	33377
322	17	53	:23	-158.54	33378
322	19	38	:15	175.12	33379
322	21	23	:07	148.77	33380
322	23	07	:59	122.43	33381

322	01	37	:19	136.49	27109
322	03	22	:14	110.13	27110
322	05	07	:09	83.78	27111
322	06	52	:04	57.42	27112
322	08	36	:59	31.07	27113
322	10	21	:55	4.71	27114
322	12	06	:50	-21.64	27115
322	13	51	:45	-48.00	27116
322	15	36	:40	-74.35	27117
322	17	21	:35	-100.71	27118
322	19	06	:30	-127.07	27119
322	20	51	:25	-153.42	27120
322	22	36	:21	-179.77	27121

322	01	40	:17	-1.49	1874
322	03	25	:11	-27.84	1875
322	05	10	:05	-54.19	1876
322	06	54	:59	-80.54	1877
322	08	39	:53	-106.89	1878
322	10	24	:47	-133.24	1879
322	12	09	:41	-159.59	1880
322	13	54	:35	174.06	1881
322	15	39	:29	147.71	1882
322	17	24	:23	121.36	1883
322	19	09	:17	95.00	1884
322	20	54	:11	68.65	1885
322	22	39	:05	42.30	1886

323	00	52	:51	96.09	33382
323	02	37	:43	69.75	33383
323	04	22	:35	43.40	33384
323	06	07	:27	17.06	33385
323	07	52	:19	-9.28	33386
323	09	37	:11	-35.62	33387
323	11	22	:03	-61.97	33388
323	13	06	:55	-88.31	33389
323	14	51	:47	-114.65	33390
323	16	36	:39	-140.99	33391
323	18	21	:31	-167.33	33392
323	20	06	:23	166.32	33393
323	21	51	:15	139.98	33394
323	23	36	:07	113.64	33395

323	00	21	:16	153.87	27122
323	02	06	:11	127.51	27123
323	03	51	:06	101.16	27124
323	05	36	:01	74.80	27125
323	07	20	:56	48.45	27126
323	09	05	:52	22.09	27127
323	10	50	:47	-4.26	27128
323	12	35	:42	-30.62	27129
323	14	20	:37	-56.97	27130
323	16	05	:32	-83.33	27131
323	17	50	:27	-109.69	27132
323	19	35	:22	-136.04	27133
323	21	20	:18	-162.39	27134
323	23	05	:13	171.25	27135

323	00	23	:59	15.95	1887
323	02	08	:53	-10.40	1888
323	03	53	:47	-36.75	1889
323	05	38	:41	-63.10	1890
323	07	23	:35	-89.45	1891
323	09	08	:29	-115.80	1892
323	10	53	:23	-142.15	1893
323	12	38	:17	-168.50	1894
323	14	23	:11	165.15	1895
323	16	08	:05	138.80	1896
323	17	52	:59	112.45	1897
323	19	37	:53	86.10	1898
323	21	22	:47	59.75	1899
323	23	07	:41	33.40	1900

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT
day hr mn sc	deg	dg		day hr mn sc	deg	dg		day hr mn sc	deg	dg	
320 01:09:44	-122.54	25390		320 00:28:47	-74.72	16428		320 00:21:04	-157.01	5889	
320 02:51:46	-148.05	25391		320 02:10:02	-100.04	16429		320 02:03:11	177.45	5890	
320 04:33:48	-123.56	25392		320 03:51:17	-125.35	16430		320 03:45:17	151.93	5891	
320 06:15:50	160.93	25393		320 05:32:31	-150.66	16431		320 05:27:23	126.41	5892	
320 07:57:51	135.44	25394		320 07:13:46	-175.97	16432		320 07:09:30	100.88	5893	
320 09:39:53	109.93	25395		320 08:55:00	158.72	16433		320 08:51:36	75.36	5894	
320 11:21:55	84.42	25396		320 10:36:15	133.41	16434		320 10:33:42	49.83	5895	
320 13:03:57	58.92	25397		320 12:17:30	108.09	16435		320 12:15:49	24.30	5896	
320 14:45:59	33.41	25398		320 13:58:44	82.79	16436		320 13:57:55	-1.22	5897	
320 16:28:01	7.90	25399		320 15:39:59	57.47	16437		320 15:40:01	-26.74	5898	
320 18:10:02	-17.59	25400		320 17:21:13	32.17	16438		320 17:22:08	-52.28	5899	
320 19:52:04	-43.10	25401		320 19:02:28	6.85	16439		320 19:04:14	-77.80	5900	
320 21:34:06	-68.61	25402		320 20:43:43	-18.47	16440		320 20:46:20	-103.32	5901	
320 23:16:08	-94.11	25403		320 22:24:57	-43.77	16441		320 22:28:27	-128.85	5902	
321 00:58:10	-119.62	25404		321 00:06:12	-69.09	16442		321 00:10:33	-154.38	5903	
321 02:40:12	-145.13	25405		321 01:47:26	-94.39	16443		321 01:52:39	-179.90	5904	
321 04:22:13	-170.62	25406		321 03:28:41	-119.71	16444		321 03:34:46	154.57	5905	
321 06:04:15	163.87	25407		321 05:09:56	-145.02	16445		321 05:16:52	129.05	5906	
321 07:46:17	138.36	25408		321 06:51:10	-170.33	16446		321 06:58:58	103.53	5907	
321 09:28:19	112.85	25409		321 08:32:25	164.36	16447		321 08:41:05	77.99	5908	
321 11:10:21	87.35	25410		321 10:13:40	139.04	16448		321 10:23:11	52.47	5909	
321 12:52:23	61.84	25411		321 11:54:54	113.74	16449		321 12:05:17	26.95	5910	
321 14:34:25	36.33	25412		321 13:36:09	88.42	16450		321 13:47:24	1.41	5911	
321 16:16:26	10.84	25413		321 15:17:23	63.12	16451		321 15:29:30	-24.11	5912	
321 17:58:28	-14.67	25414		321 16:58:38	37.80	16452		321 17:11:36	-49.63	5913	
321 19:40:30	-40.18	25415		321 18:39:53	12.49	16453		321 18:53:43	-75.16	5914	
321 21:22:32	-65.68	25416		321 20:21:07	-12.82	16454		321 20:35:49	-100.68	5915	
321 23:04:34	-91.19	25417		321 22:02:22	-38.13	16455		321 22:17:55	-126.21	5916	
321 23:43:36	-63.44	16456									
322 00:46:36	-116.70	25418		322 01:24:51	-88.75	16457		322 00:00:02	-151.74	5917	
322 02:28:37	-142.19	25419		322 03:06:06	-114.07	16458		322 01:42:08	-177.26	5918	
322 04:10:39	-167.70	25420		322 04:47:20	-139.37	16459		322 03:24:14	157.22	5919	
322 05:52:41	166.79	25421		322 06:28:35	-164.69	16460		322 05:06:21	131.68	5920	
322 07:34:43	141.28	25422		322 08:09:49	170.01	16461		322 06:48:27	106.16	5921	
322 09:16:45	115.78	25423		322 09:51:04	144.69	16462		322 08:30:33	80.64	5922	
322 10:58:47	90.27	25424		322 11:32:19	119.37	16463		322 10:12:40	55.11	5923	
322 12:40:48	64.78	25425		322 13:13:33	94.07	16464		322 11:54:46	29.58	5924	
322 14:22:50	39.27	25426		322 14:54:48	68.75	16465		322 13:36:52	4.06	5925	
322 16:04:52	13.76	25427		322 16:36:02	43.45	16466		322 15:18:59	-21.47	5926	
322 17:46:54	-11.75	25428		322 18:17:17	18.13	16467		322 17:01:05	-46.99	5927	
322 19:28:56	-37.25	25429		322 19:58:32	-7.18	16468		322 18:43:11	-72.51	5928	
322 21:10:58	-62.76	25430		322 21:39:46	-32.49	16469		322 20:25:18	-98.05	5929	
322 22:52:59	-88.26	25431		322 23:21:01	-57.80	16470		322 22:07:24	-123.57	5930	
								322 23:49:30	-149.09	5931	
323 00:35:01	-113.76	25432		323 01:02:15	-83.10	16471		323 01:31:37	-174.62	5932	
323 02:17:03	-139.27	25433		323 02:43:30	-108.42	16472		323 03:13:43	159.85	5933	
323 03:59:05	-164.78	25434		323 04:24:45	-133.74	16473		323 04:55:49	134.33	5934	
323 05:41:07	169.71	25435		323 06:05:59	-159.04	16474		323 06:37:56	108.80	5935	
323 07:23:09	144.21	25436		323 07:47:14	175.64	16475		323 08:20:02	83.28	5936	
323 09:05:10	118.71	25437		323 09:28:28	150.34	16476		323 10:02:08	57.76	5937	
323 10:47:12	93.21	25438		323 11:09:43	125.02	16477		323 11:44:15	32.22	5938	
323 12:29:14	67.70	25439		323 12:50:58	99.71	16478		323 13:26:21	6.70	5939	
323 14:11:16	42.19	25440		323 14:32:12	74.40	16479		323 15:08:27	-18.82	5940	
323 15:53:18	16.68	25441		323 16:13:27	49.09	16480		323 16:50:34	-44.36	5941	
323 17:35:20	-8.82	25442		323 17:54:41	23.78	16481		323 18:32:40	-69.88	5942	
323 19:17:21	-34.32	25443		323 19:35:56	-1.53	16482		323 20:14:46	-95.40	5943	
323 20:59:23	-59.83	25444		323 21:17:11	-26.85	16483		323 21:56:53	-120.93	5944	
323 22:41:25	-85.33	25445		323 22:58:25	-52.15	16484		323 23:38:59	-146.45	5945	

SATELLITE C2				SATELLITE C3				SATELLITE C4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 183 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT
day hr mn sc	deg	dg		day hr mn sc	deg	dg		day hr mn sc	deg	dg	
324 01:20:59	87.30	33396		324 00:50:08	144.89	27136		324 00:52:35	7.05	1901	
324 03:05:51	60.95	33397		324 02:35:03	118.54	27137		324 02:37:29	-19.30	1902	
324 04:50:43	34.61	33398		324 04:19:58	92.18	27138		324 04:22:23	-45.65	1903	
324 06:35:35	8.27	33399		324 06:04:53	65.83	27139		324 06:07:17	-72.01	1904	
324 08:20:27	-18.07	33400		324 07:49:49	39.47	27140		324 07:52:11	-98.36	1905	
324 10:05:19	-44.42	33401		324 09:34:44	13.12	27141		324 09:37:05	-124.71	1906	
324 11:50:11	-70.76	33402		324 11:19:39	-13.24	27142		324 11:21:59	-151.06	1907	
324 13:35:03	-97.10	33403		324 13:04:34	-39.59	27143		324 13:06:53	-177.41	1908	
324 15:19:55	-123.44	33404		324 14:49:29	-65.95	27144		324 14:51:47	156.24	1909	
324 17:04:47	-149.78	33405		324 16:34:24	-92.30	27145		324 16:36:41	129.89	1910	
324 18:49:39	-176.13	33406		324 18:19:19	-118.66	27146		324 18:21:35	103.54	1911	
324 20:34:31	157.53	33407		324 20:04:15	-145.01	27147		324 20:06:29	77.19	1912	
324 22:19:23	131.19	33408		324 21:49:10	-171.37	27148		324 21:51:23	50.84	1913	
				324 23:34:05	162.27	27149		324 23:36:17	24.49	1914	
325 00:04:15	104.85	33409		325 01:19:00	135.92	27150		325 01:21:11	-1.86	1915	
325 01:49:07	78.50	33410		325 03:03:55	109.56	27151		325 03:06:05	-28.21	1916	
325 03:33:59	52.16	33411		325 04:48:50	83.21	27152		325 04:50:59	-54.56	1917	
325 05:18:51	25.82	33412		325 06:33:46	56.85	27153		325 06:35:53	-80.91	1918	
325 07:03:43	-52	33413		325 08:18:41	30.50	27154		325 08:20:47	-107.26	1919	
325 08:48:35	-26.87	33414		325 10:03:36	4.14	27155		325 10:05:41	-133.61	1920	
325 10:33:27	-53.21	33415		325 11:48:31	-22.21	27156		325 11:50:35	-159.96	1921	
325 12:18:19	-79.55	33416		325 13:33:26	-48.57	27157		325 13:35:29	173.69	1922	
325 14:03:11	-105.89	33417		325 15:18:21	-74.92	27158		325 15:20:23	147.33	1923	
325 15:48:03	-132.23	33418		325 17:03:17	-101.28	27159		325 17:05:17	120.98	1924	
325 17:32:55	-158.58	33419		325 18:48:12	-127.63	27160		325 18:50:11	94.63	1925	
325 19:17:47	175.08	33420		325 20:33:07	-153.99	27161		325 20:35:05	68.28	1926	
325 21:02:39	148.74	33421		325 22:18:02	179.66	27162		325 22:19:59	41.93	1927	
325 22:47:31	122.40	33422									
326 00:32:23	96.05	33423		326 00:02:57	153.30	27163		326 00:04:53	15.58	1928	
326 02:17:15	69.71	33424		326 01:47:52	126.94	27164		326 01:49:47	-10.77	1929	
326 04:02:07	43.37	33425		326 03:32:47	100.59	27165		326 03:34:41	-37.12	1930	
326 05:46:59	17.03	33426		326 05:17:43	74.23	27166		326 05:19:35	-63.47	1931	
326 07:31:51	-9.32	33427		326 07:02:38	47.88	27167		326 07:04:29	-89.82	1932	
326 09:16:43	-35.66	33428		326 08:47:33	21.52	27168		326 08:49:23	-116.17	1933	
326 11:01:35	-62.00	33429		326 10:32:28	-4.83	27169		326 10:34:17	-142.52	1934	
326 12:46:27	-88.34	33430		326 12:17:23	-31.19	27170		326 12:19:11	-168.87	1935	
326 14:31:19	-114.68	33431		326 14:02:18	-57.54	27171		326 14:04:05	164.78	1936	
326 16:16:11	-141.03	33432		326 15:47:14	-83.90	27172		326 15:48:59	138.43	1937	
326 18:01:03	-167.37	33433		326 17:32:09	-110.25	27173		326 17:33:53	112.08	1938	
326 19:45:55	166.29	33434		326 19:17:04	-136.61	27174		326 19:18:47	85.73	1939	
326 21:30:47	139.95	33435		326 21:01:59	-162.96	27175		326 21:03:41	59.38	1940	
326 23:15:39	113.60	33436		326 22:46:54	170.68	27176		326 22:48:35	33.03	1941	
327 01:00:31	87.26	33437		327 00:31:49	144.32	27177		327 00:33:29	6.67	1942	
327 02:45:23	60.92	33438		327 02:16:44	117.97	27178		327 02:18:23	-19.68	1943	
327 04:30:15	34.58	33439		327 04:01:40	91.62	27179		327 04:03:17	-46.03	1944	
327 06:15:07	8.23	33440		327 05:46:35	65.26	27180		327 05:48:11	-72.38	1945	
327 07:59:59	-18.11	33441		327 07:31:30	38.90	27181		327 07:33:05	-98.73	1946	
327 09:44:51	-44.45	33442		327 09:16:25	12.55	27182		327 09:17:59	-125.08	1947	
327 11:29:43	-70.79	33443		327 11:01:20	-13.81	27183		327 11:02:53	-151.43	1948	
327 13:14:35	-97.13	33444		327 12:46:15	-40.16	27184		327 12:47:47	-177.78	1949	
327 14:59:27	-123.48	33445		327 14:31:11	-66.52	27185		327 14:32:41	155.87	1950	
327 16:44:19	-149.82	33446		327 16:16:06	-92.87	27186		327 16:17:36	129.52	1951	
327 18:29:11	-176.16	33447		327 18:01:01	-119.23	27187		327 18:02:30	103.17	1952	
327 20:14:03	157.50	33448		327 19:45:56	-145.58	27188		327 19:47:24	76.82	1953	
327 21:58:55	131.15	33449		327 21:30:51	-171.94	27189		327 21:32:18	50.47	1954	
327 23:43:47	104.81	33450		327 23:15:46	161.70	27190		327 23:17:12	24.12	1955	

SATELLITE S2							SATELLITE S3							SATELLITE S4							
Ascending Node Predictions							Ascending Node Predictions							Ascending Node Predictions							
Predicting for 182 days							Predicting for 183 days							Predicting for 183 days							
TIME (GMT)			E LONG			ORBIT			TIME (GMT)			E LONG			TIME (GMT)			E LONG			
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc
324	00	23	:27	-110.	84	25446	324	00	:39	:40	-77.	47	16485	324	01	:21	:05	-171.	98	5946	
324	02	05	:29	-136.	35	25447	324	02	:20	:55	-102.	79	16486	324	03	:03	:12	162.	49	5947	
324	03	47	:31	-161.	86	25448	324	04	:02	:09	-128.	09	16487	324	04	:45	:18	136.	97	5948	
324	05	29	:32	172.	65	25449	324	05	:43	:24	-153.	41	16488	324	06	:27	:24	111.	45	5949	
324	07	11	:34	147.	14	25450	324	07	:24	:38	-178.	71	16489	324	08	:09	:31	85.	91	5950	
324	08	53	:36	121.	64	25451	324	09	:05	:53	155.	97	16490	324	09	:51	:37	60.	39	5951	
324	10	35	:38	96.	13	25452	324	10	:47	:08	130.	66	16491	324	11	:33	:43	34.	87	5952	
324	12	17	:40	70.	62	25453	324	12	:28	:22	105.	36	16492	324	13	:15	:50	9.	34	5953	
324	13	59	:42	45.	11	25454	324	14	:09	:37	80.	04	16493	324	14	:57	:56	-16.	19	5954	
324	15	41	:43	19.	62	25455	324	15	:50	:51	54.	74	16494	324	16	:40	:02	-41.	71	5955	
324	17	23	:45	-5.	89	25456	324	17	:32	:06	29.	42	16495	324	18	:22	:09	-67.	24	5956	
324	19	05	:47	-31.	40	25457	324	19	:13	:21	4.	10	16496	324	20	:04	:15	-92.	76	5957	
324	20	47	:49	-56.	90	25458	324	20	:54	:35	-21.	20	16497	324	21	:46	:21	-118.	28	5958	
324	22	29	:51	-82.	41	25459	324	22	:35	:50	-46.	52	16498	324	23	:28	:29	-143.	82	5959	
325	00	11	:53	-107.	92	25460	325	00	:17	:04	-71.	82	16499	325	01	:10	:34	-169.	34	5960	
325	01	53	:55	-133.	42	25461	325	01	:58	:19	-97.	14	16500	325	02	:52	:41	165.	13	5961	
325	03	35	:56	-158.	92	25462	325	03	:39	:34	-122.	45	16501	325	04	:34	:47	139.	60	5962	
325	05	17	:58	175.	57	25463	325	05	:20	:48	-147.	76	16502	325	06	:16	:53	114.	08	5963	
325	07	00	:00	150.	07	25464	325	07	:02	:03	-173.	07	16503	325	07	:59	:00	88.	55	5964	
325	08	42	:02	124.	56	25465	325	08	:43	:17	161.	62	16504	325	09	:41	:06	63.	03	5965	
325	10	24	:04	99.	05	25466	325	10	:24	:32	136.	31	16505	325	11	:23	:12	37.	51	5966	
325	12	06	:06	73.	54	25467	325	12	:05	:47	110.	99	16506	325	13	:05	:19	11.	97	5967	
325	13	48	:07	48.	05	25468	325	13	:47	:01	85.	69	16507	325	14	:47	:25	-13.	55	5968	
325	15	30	:09	22.	54	25469	325	15	:28	:16	60.	37	16508	325	16	:29	:31	-39.	07	5969	
325	17	12	:11	-2.	96	25470	325	17	:09	:30	35.	07	16509	325	18	:11	:38	-64.	61	5970	
325	18	54	:13	-28.	47	25471	325	18	:50	:45	9.	75	16510	325	19	:53	:44	-90.	13	5971	
325	20	36	:15	-53.	98	25472	325	20	:32	:00	-15.	57	16511	325	21	:35	:50	-115.	65	5972	
325	22	18	:17	-79.	49	25473	325	22	:13	:14	-40.	87	16512	325	23	:17	:57	-141.	18	5973	
325	23	:54	:29	-66.	18	16513															
326	00	00	:18	-104.	98	25474	326	01	:35	:43	-91.	49	16514	326	01	:00	:03	-166.	70	5974	
326	01	42	:20	-130.	49	25475	326	03	:16	:58	-116.	80	16515	326	02	:42	:09	167.	78	5975	
326	03	24	:22	-156.	00	25476	326	04	:58	:13	-142.	12	16516	326	04	:24	:16	142.	24	5976	
326	05	06	:24	178.	50	25477	326	06	:39	:27	-167.	42	16517	326	06	:06	:22	116.	72	5977	
326	06	48	:26	152.	99	25478	326	08	:20	:42	167.	26	16518	326	07	:48	:28	91.	20	5978	
326	08	30	:28	127.	48	25479	326	10	:01	:56	141.	96	16519	326	09	:30	:35	65.	66	5979	
326	10	12	:29	101.	99	25480	326	11	:43	:11	116.	64	16520	326	11	:12	:41	40.	14	5980	
326	11	54	:31	76.	48	25481	326	13	:24	:26	91.	32	16521	326	12	:54	:47	14.	62	5981	
326	13	36	:33	50.	97	25482	326	15	:05	:40	66.	02	16522	326	14	:36	:54	-10.	91	5982	
326	15	18	:35	25.	47	25483	326	16	:46	:55	40.	70	16523	326	16	:19	:00	-36.	43	5983	
326	17	00	:37	-	.04	25484	326	18	:28	:09	15.	40	16524	326	18	:01	:06	-61.	96	5984	
326	18	42	:39	-25.	55	25485	326	20	:09	:24	-9.	92	16525	326	19	:43	:13	-87.	49	5985	
326	20	24	:40	-51.	04	25486	326	21	:50	:39	-35.	23	16526	326	21	:25	:19	-113.	01	5986	
326	22	06	:42	-76.	55	25487	326	23	:31	:53	-60.	54	16527	326	23	:07	:25	-138.	53	5987	
327	01	30	:46	-127.	57	25489	327	01	:13	:08	-85.	85	16528	327	00	:49	:32	-164.	07	5988	
327	03	12	:48	-153.	07	25490	327	02	:54	:23	-111.	17	16529	327	02	:31	:38	170.	41	5989	
327	04	54	:50	-178.	58	25491	327	04	:35	:37	-136.	47	16530	327	04	:13	:44	144.	89	5990	
327	06	36	:51	155.	93	25492	327	06	:16	:52	-161.	79	16531	327	05	:55	:51	119.	36	5991	
327	08	18	:53	130.	42	25493	327	07	:58	:06	172.	91	16532	327	07	:37	:57	93.	83	5992	
327	10	00	:55	104.	91	25494	327	09	:39	:21	147.	59	16533	327	09	:20	:03	68.	31	5993	
327	11	42	:57	79.	40	25495	327	11	:20	:36	122.	28	16534	327	11	:02	:10	42.	78	5994	
327	13	24	:59	53.	90	25496	327	13	:01	:50	96.	97	16535	327	12	:44	:16	17.	26	5995	
327	15	07	:01	28.	39	25497	327	14	:43	:05	71.	66	16536	327	14	:26	:22	-8.	26	5996	
327	16	49	:03	2.	88	25498	327	16	:24	:19	46.	35	16537	327	16	:08	:29	-33.	80	5997	
327	18	31	:04	-22.	61	25499	327	18	:05	:34	21.	04	16538	327	17	:50	:35	-59.	32	5998	
327	20	13	:06	-48.	12	25500	327	19	:46	:49	-4.	28	16539	327	19	:32	:41	-84.	84	5999	
327	21	55	:08	-73.	63	25501	327	21	:28	:03	-29.	58	16540	327	21	:14	:48	-110.	38	6000	
327	23	37	:10	-99.	14	25502	327	23	:09	:18	-54.	90	16541	327	22	:56	:54	-135.	90	6001	

West longitude is negative (-)

**SATELLITE C2**  
**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

328 01:28:39	78.47	33451
328 03:13:31	52.13	33452
328 04:58:23	25.78	33453
328 06:43:15	-56	33454
328 08:28:07	-26.90	33455
328 10:12:59	-53.24	33456
328 11:57:51	-79.58	33457
328 13:42:43	-105.93	33458
328 15:27:35	-132.27	33459
328 17:12:27	-158.61	33460
328 18:57:19	175.05	33461
328 20:42:11	148.70	33462
328 22:27:03	122.36	33463

329 00:11:55	96.02	33464
329 01:56:47	69.68	33465
329 03:41:39	43.33	33466
329 05:26:31	16.99	33467
329 07:11:23	-9.35	33468
329 08:56:15	-35.69	33469
329 10:41:07	-62.03	33470
329 12:25:59	-88.38	33471
329 14:10:51	-114.72	33472
329 15:55:43	-141.06	33473
329 17:40:35	-167.40	33474
329 19:25:27	166.25	33475
329 21:10:19	139.91	33476
329 22:55:11	113.57	33477

330 00:40:03	87.23	33478
330 02:24:55	60.88	33479
330 04:09:47	34.54	33480
330 05:54:39	8.20	33481
330 07:39:31	-18.14	33482
330 09:24:23	-44.48	33483
330 11:09:15	-70.83	33484
330 12:54:07	-97.17	33485
330 14:38:59	-123.51	33486
330 16:23:51	-149.85	33487
330 18:08:43	-176.20	33488
330 19:53:35	-157.46	33489
330 21:38:27	131.12	33490
330 23:23:19	104.78	33491

331 01:08:11	78.43	33492
331 02:53:03	52.09	33493
331 04:37:55	25.75	33494
331 06:22:47	-59	33495
331 08:07:39	-26.94	33496
331 09:52:31	-53.28	33497
331 11:37:23	-79.62	33498
331 13:22:15	-105.96	33499
331 15:07:07	-132.30	33500
331 16:51:59	-158.65	33501
331 18:36:51	175.01	33502
331 20:21:43	148.67	33503
331 22:06:35	122.33	33504
331 23:51:27	95.98	33505

**SATELLITE C3**  
**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

328 01:00:41	135.35	27191
328 02:45:37	109.00	27192
328 04:30:32	82.64	27193
328 06:15:27	56.28	27194
328 08:00:22	29.93	27195
328 09:45:17	3.57	27196
328 11:30:12	-22.78	27197
328 13:15:08	-49.14	27198
328 15:00:03	-75.49	27199
328 16:44:58	-101.85	27200
328 18:29:53	-128.20	27201
328 20:14:48	-154.56	27202
328 21:59:43	179.09	27203
328 23:44:38	152.73	27204

329 01:29:34	126.38	27205
329 03:14:29	100.02	27206
329 04:59:24	73.66	27207
329 06:44:19	47.31	27208
329 08:29:14	20.95	27209
329 10:14:09	-5.40	27210
329 11:59:05	-31.76	27211
329 13:44:00	-58.11	27212
329 15:28:55	-84.47	27213
329 17:13:50	-110.82	27214
329 18:58:45	-137.18	27215
329 20:43:40	-163.53	27216
329 22:28:35	170.11	27217

330 00:13:31	143.76	27218
330 01:58:26	117.40	27219
330 03:43:21	91.05	27220
330 05:28:16	64.69	27221
330 07:13:11	38.33	27222
330 08:58:06	11.98	27223
330 10:43:02	-14.38	27224
330 12:27:57	-40.73	27225
330 14:12:52	-67.09	27226
330 15:57:47	-93.44	27227
330 17:42:42	-119.80	27228
330 19:27:37	-146.15	27229
330 21:12:33	-172.51	27230
330 22:57:28	161.14	27231

331 00:42:23	134.78	27232
331 02:27:18	108.43	27233
331 04:12:13	82.07	27234
331 05:57:08	55.71	27235
331 07:42:03	29.36	27236
331 09:26:59	3.01	27237
331 11:11:54	-23.35	27238
331 12:56:49	-49.71	27239
331 14:41:44	-76.06	27240
331 16:26:39	-102.42	27241
331 18:11:34	-128.77	27242
331 19:56:30	-155.13	27243
331 21:41:25	178.52	27244
331 23:26:20	152.16	27245

**SATELLITE C4**  
**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

328 01:02:06	-2.23	1956
328 02:47:00	-28.58	1957
328 04:31:54	-54.93	1958
328 06:16:48	-81.28	1959
328 08:01:42	-107.63	1960
328 09:46:36	-133.98	1961
328 11:31:30	-160.33	1962
328 13:16:24	-173.32	1963
328 15:01:18	146.97	1964
328 16:46:12	120.62	1965
328 18:31:06	94.26	1966
328 20:16:00	67.91	1967
328 22:00:54	41.56	1968
328 23:45:48	15.21	1969

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT	
day hr mn sc	deg dg			day hr mn sc	deg dg			day hr mn sc	deg dg		
328 01:19:12	-124.64	25503		328 00:50:32	-80.20	16542		328 00:39:00	-161.42	6002	
328 03:01:14	-150.15	25504		328 02:31:47	-105.52	16543		328 02:21:07	173.05	6003	
328 04:43:15	-175.64	25505		328 04:13:02	-130.84	16544		328 04:03:13	147.53	6004	
328 06:25:17	158.85	25506		328 05:54:16	-156.14	16545		328 05:45:19	122.00	6005	
328 08:07:19	133.34	25507		328 07:35:31	178.54	16546		328 07:27:26	96.47	6006	
328 09:49:21	107.83	25508		328 09:16:45	153.24	16547		328 09:09:32	70.95	6007	
328 11:31:23	82.33	25509		328 10:58:00	127.92	16548		328 10:51:38	45.43	6008	
328 13:13:25	56.82	25510		328 12:39:15	102.61	16549		328 12:33:45	19.89	6009	
328 14:55:26	31.32	25511		328 14:20:29	77.30	16550		328 14:15:51	-5.63	6010	
328 16:37:28	5.82	25512		328 16:01:44	51.99	16551		328 15:57:57	-31.15	6011	
328 18:19:30	-19.69	25513		328 17:42:58	26.68	16552		328 17:40:04	-56.68	6012	
328 20:01:32	-45.20	25514		328 19:24:13	1.37	16553		328 19:22:10	-82.21	6013	
328 21:43:34	-70.70	25515		328 21:05:28	-23.95	16554		328 21:04:16	-107.73	6014	
328 23:25:36	-96.21	25516		328 22:46:42	-49.25	16555		328 22:46:23	-133.26	6015	
329 01:07:37	-121.71	25517		329 00:27:57	-74.57	16556		329 00:28:29	-158.78	6016	
329 02:49:39	-147.21	25518		329 02:09:11	-99.87	16557		329 02:10:35	175.70	6017	
329 04:31:41	-172.72	25519		329 03:50:26	-125.19	16558		329 03:52:42	150.16	6018	
329 06:13:43	161.77	25520		329 05:31:41	-150.50	16559		329 05:34:48	124.64	6019	
329 07:55:45	136.26	25521		329 07:12:55	-175.81	16560		329 07:16:54	99.12	6020	
329 09:37:47	110.76	25522		329 08:54:10	158.88	16561		329 08:59:01	73.59	6021	
329 11:19:48	85.26	25523		329 10:35:24	133.57	16562		329 10:41:07	48.06	6022	
329 13:01:50	59.76	25524		329 12:16:39	108.26	16563		329 12:23:13	22.54	6023	
329 14:43:52	34.25	25525		329 13:57:54	82.94	16564		329 14:05:20	-2.99	6024	
329 16:25:54	8.74	25526		329 15:39:08	57.64	16565		329 15:47:26	-28.51	6025	
329 18:07:56	-16.77	25527		329 17:20:23	32.32	16566		329 17:29:32	-54.03	6026	
329 19:49:58	-42.27	25528		329 19:01:37	7.02	16567		329 19:11:39	-79.57	6027	
329 21:32:00	-67.78	25529		329 20:42:52	-18.30	16568		329 20:53:45	-105.09	6028	
329 23:14:01	-93.28	25530		329 22:24:07	-43.62	16569		329 22:35:51	-130.61	6029	
330 00:56:03	-118.78	25531		330 00:05:21	-68.92	16570		330 00:17:58	-156.15	6030	
330 02:38:05	-144.29	25532		330 01:46:36	-94.24	16571		330 02:00:04	178.33	6031	
330 04:20:07	-169.80	25533		330 03:27:51	-119.55	16572		330 03:42:10	152.81	6032	
330 06:02:09	164.69	25534		330 05:09:05	-144.86	16573		330 05:24:17	127.28	6033	
330 07:44:11	139.19	25535		330 06:50:20	-170.17	16574		330 07:06:23	101.76	6034	
330 09:26:12	113.69	25536		330 08:31:34	164.52	16575		330 08:48:29	76.23	6035	
330 11:08:14	88.19	25537		330 10:12:49	139.21	16576		330 10:30:36	50.70	6036	
330 12:50:16	62.68	25538		330 11:54:04	113.89	16577		330 12:12:42	25.18	6037	
330 14:32:18	37.17	25539		330 13:35:18	88.59	16578		330 13:54:48	-34	6038	
330 16:14:20	11.66	25540		330 15:16:33	63.27	16579		330 15:36:55	-25.08	6039	
330 17:56:22	-13.84	25541		330 16:57:47	37.97	16580		330 17:19:01	-51.40	6040	
330 19:38:23	-39.34	25542		330 18:39:02	12.65	16581		330 19:01:07	-76.92	6041	
330 21:20:25	-64.85	25543		330 20:20:17	-12.66	16582		330 20:43:14	-102.45	6042	
330 23:02:27	-90.35	25544		330 22:01:31	-37.97	16583		330 22:25:20	-127.98	6043	
330 23:42:46				330 23:42:46	-63.28	16584					
331 00:44:29	-115.86	25545		331 01:24:00	-88.59	16585		331 00:07:26	-153.50	6044	
331 02:26:31	-141.37	25546		331 03:05:15	-113.90	16586		331 01:49:33	-179.03	6045	
331 04:08:33	-166.88	25547		331 04:46:30	-139.22	16587		331 03:31:39	155.45	6046	
331 05:50:34	167.63	25548		331 06:27:44	-164.52	16588		331 05:13:45	129.93	6047	
331 07:32:36	142.12	25549		331 08:08:59	170.16	16589		331 06:55:52	104.39	6048	
331 09:14:38	116.62	25550		331 09:50:13	144.86	16590		331 08:37:58	78.87	6049	
331 10:56:40	91.11	25551		331 11:31:28	119.54	16591		331 10:20:04	53.35	6050	
331 12:38:42	65.60	25552		331 13:12:43	94.22	16592		331 12:02:11	27.81	6051	
331 14:20:44	40.09	25553		331 14:53:57	68.92	16593		331 13:44:17	2.29	6052	
331 16:02:46	14.59	25554		331 16:35:12	43.60	16594		331 15:26:23	-23.23	6053	
331 17:44:47	-10.91	25555		331 18:16:26	18.30	16595		331 17:08:30	-48.76	6054	
331 19:26:49	-36.41	25556		331 19:57:41	-7.02	16596		331 18:50:36	-74.28	6055	
331 21:08:51	-61.92	25557		331 21:38:56	-32.33	16597		331 20:32:42	-99.81	6056	
331 22:50:53	-87.43	25558		331 23:20:10	-57.64	16598		331 22:14:49	-125.34	6057	
								331 23:56:55	-150.86	6058	

SATELLITE C2							SATELLITE C3							SATELLITE C4									
Ascending Node Predictions							Ascending Node Predictions							Ascending Node Predictions									
Predicting for 183 days							Predicting for 183 days							Predicting for 183 days									
TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg			
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg
332 01:36:19	69.64	33506	332 01:11:15	125.81	27246	332 01:11:36	-11.51	2011															
332 03:21:11	43.30	33507	332 02:56:10	99.45	27247	332 02:56:30	-37.86	2012															
332 05:06:03	16.96	33508	332 04:41:05	73.09	27248	332 04:41:24	-64.21	2013															
332 06:50:55	-9.39	33509	332 06:26:00	46.74	27249	332 06:26:18	-90.56	2014															
332 08:35:47	-35.73	33510	332 08:10:56	20.39	27250	332 08:11:12	-116.91	2015															
332 10:20:39	-62.07	33511	332 09:55:51	-5.97	27251	332 09:56:06	-143.26	2016															
332 12:05:31	-88.41	33512	332 11:40:46	-32.33	27252	332 11:41:00	-169.61	2017															
332 13:50:23	-114.75	33513	332 13:25:41	-58.68	27253	332 13:25:54	164.04	2018															
332 15:35:15	-141.10	33514	332 15:10:36	-85.04	27254	332 15:10:48	137.68	2019															
332 17:20:07	-167.44	33515	332 16:55:31	-111.39	27255	332 16:55:42	111.33	2020															
332 19:04:59	166.22	33516	332 18:40:27	-137.75	27256	332 18:40:36	84.98	2021															
332 20:49:51	139.88	33517	332 20:25:22	-164.10	27257	332 20:25:30	58.63	2022															
332 22:34:43	113.53	33518	332 22:10:17	169.54	27258	332 22:10:25	32.29	2023															
			332 23:55:12	143.19	27259	332 23:55:19	5.93	2024															
333 00:19:35	87.19	33519	333 01:40:07	116.83	27260	333 01:40:13	-20.42	2025															
333 02:04:27	60.85	33520	333 03:25:02	90.48	27261	333 03:25:07	-46.77	2026															
333 03:49:19	34.51	33521	333 05:09:57	64.12	27262	333 05:10:01	-73.12	2027															
333 05:34:11	8.16	33522	333 06:54:53	37.77	27263	333 06:54:55	-99.47	2028															
333 07:19:03	-18.18	33523	333 08:39:48	11.41	27264	333 08:39:49	-125.82	2029															
333 09:03:55	-44.52	33524	333 10:24:43	-14.95	27265	333 10:24:43	-152.17	2030															
333 10:48:47	-70.86	33525	333 12:09:38	-41.30	27266	333 12:09:37	-178.52	2031															
333 12:33:39	-97.20	33526	333 13:54:33	-67.66	27267	333 13:54:31	155.13	2032															
333 14:18:31	-123.55	33527	333 15:39:28	-94.01	27268	333 15:39:25	128.78	2033															
333 16:03:23	-149.89	33528	333 17:24:24	-120.37	27269	333 17:24:19	102.43	2034															
333 17:48:15	-176.23	33529	333 19:09:19	-146.72	27270	333 19:09:13	76.08	2035															
333 19:33:07	157.43	33530	333 20:54:14	-173.08	27271	333 20:54:07	49.73	2036															
333 21:17:59	131.08	33531	333 22:39:09	160.57	27272	333 22:39:01	23.38	2037															
333 23:02:51	104.74	33532																					
334 00:47:43	78.40	33533	334 00:24:04	134.21	27273	334 00:23:55	-2.97	2038															
334 02:32:35	52.06	33534	334 02:08:59	107.86	27274	334 02:08:49	-29.32	2039															
334 04:17:27	25.71	33535	334 03:53:54	81.50	27275	334 03:53:43	-55.68	2040															
334 06:02:19	-6.63	33536	334 05:38:50	55.15	27276	334 05:38:37	-82.03	2041															
334 07:47:11	-26.97	33537	334 07:23:45	28.79	27277	334 07:23:31	-108.38	2042															
334 09:32:03	-53.31	33538	334 09:08:40	2.44	27278	334 09:08:25	-134.73	2043															
334 11:16:55	-79.66	33539	334 10:53:35	-23.92	27279	334 10:53:19	-161.08	2044															
334 13:01:47	-106.00	33540	334 12:38:30	-50.28	27280	334 12:38:13	172.57	2045															
334 14:46:39	-132.34	33541	334 14:23:25	-76.63	27281	334 14:23:07	146.22	2046															
334 16:31:31	-158.68	33542	334 16:08:21	-102.98	27282	334 16:08:01	119.87	2047															
334 18:16:23	174.98	33543	334 17:53:16	-129.34	27283	334 17:52:55	93.52	2048															
334 20:01:15	148.63	33544	334 19:38:11	-155.70	27284	334 19:37:49	67.17	2049															
334 21:46:07	122.29	33545	334 21:23:06	177.95	27285	334 21:22:43	40.82	2050															
334 23:30:59	95.95	33546	334 23:08:01	151.59	27286	334 23:07:37	14.47	2051															
335 01:15:51	69.61	33547	335 00:52:56	125.24	27287	335 00:52:31	-11.88	2052															
335 03:00:43	43.26	33548	335 02:37:51	98.88	27288	335 02:37:25	-38.23	2053															
335 04:45:35	16.92	33549	335 04:22:47	72.53	27289	335 04:22:19	-64.58	2054															
335 06:30:27	-9.42	33550	335 06:07:42	46.17	27290	335 06:07:13	-90.93	2055															
335 08:15:19	-35.76	33551	335 07:52:37	19.82	27291	335 07:52:07	-117.28	2056															
335 10:00:11	-62.11	33552	335 09:37:32	-6.54	27292	335 09:37:01	-143.64	2057															
335 11:45:03	-88.45	33553	335 11:22:27	-32.90	27293	335 11:21:55	-169.99	2058															
335 13:29:55	-114.79	33554	335 13:07:22	-59.25	27294	335 13:06:49	163.66	2059															
335 15:14:47	-141.13	33555	335 14:52:18	-85.60	27295	335 14:51:43	137.31	2060															
335 16:59:39	-167.47	33556	335 16:37:13	-111.96	27296	335 16:36:37	110.96	2061															
335 18:44:31	166.18	33557	335 18:22:08	-138.32	27297	335 18:21:31	84.61	2062															
335 20:29:23	139.84	33558	335 20:07:03	-164.67	27298	335 20:06:25	58.26	2063															
335 22:14:15	113.50	33559	335 21:51:58	168.97	27299	335 21:51:19	31.91	2064															
335 23:59:07	87.16	33560	335 23:36:53	142.62	27300	335 23:36:13	5.56	2065															

West longitude is negative (-)

**SATELLITE S2**

**Ascending Node Predictions**  
**Predicting for 182 days**  
 TIME (GMT) E LONG ORBIT  
 day hr mn sc deg dg

332 00:32:55	-112.94	25559
332 02:14:57	-138.44	25560
332 03:56:58	-163.94	25561
332 05:39:00	170.55	25562
332 07:21:02	145.05	25563
332 09:03:04	119.54	25564
332 10:45:06	94.03	25565
332 12:27:08	68.52	25566
332 14:09:09	43.03	25567
332 15:51:11	17.52	25568
332 17:33:13	-7.98	25569
332 19:15:15	-33.49	25570
332 20:57:17	-59.00	25571
332 22:39:19	-84.51	25572

**SATELLITE S3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
 TIME (GMT) E LONG ORBIT  
 day hr mn sc deg dg

332 01:01:25	-82.95	16599
332 02:42:39	-108.26	16600
332 04:23:54	-133.57	16601
332 06:05:09	-158.89	16602
332 07:46:23	175.81	16603
332 09:27:38	150.49	16604
332 11:08:52	125.19	16605
332 12:50:07	99.87	16606
332 14:31:22	74.56	16607
332 16:12:36	49.25	16608
332 17:53:51	23.94	16609
332 19:35:05	-1.37	16610
332 21:16:20	-26.68	16611
332 22:57:35	-52.00	16612

**SATELLITE S4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
 TIME (GMT) E LONG ORBIT  
 day hr mn sc deg dg

332 01:39:01	-176.38	6059
332 03:21:08	158.08	6060
332 05:03:14	132.56	6061
332 06:45:20	107.04	6062
332 08:27:27	81.51	6063
332 10:09:33	55.98	6064
332 11:51:40	30.45	6065
332 13:33:46	4.93	6066
332 15:15:52	-20.59	6067
332 16:57:59	-46.13	6068
332 18:40:05	-71.65	6069
332 20:22:11	-97.17	6070
332 22:04:18	-122.70	6071
332 23:46:24	-148.23	6072

333 00:21:20	-110.00	25573
333 02:03:22	-135.51	25574
333 03:45:24	-161.02	25575
333 05:27:26	173.48	25576
333 07:09:28	147.97	25577
333 08:51:30	122.46	25578
333 10:33:32	96.95	25579
333 12:15:33	71.46	25580
333 13:57:35	45.95	25581
333 15:39:37	20.45	25582
333 17:21:39	-5.06	25583
333 19:03:41	-30.57	25584
333 20:45:43	-56.08	25585
333 22:27:44	-81.57	25586

333 00:38:49	-77.30	16613
333 02:20:04	-102.62	16614
333 04:01:18	-127.92	16615
333 05:42:33	-153.24	16616
333 07:23:48	-178.56	16617
333 09:05:02	156.14	16618
333 10:46:17	130.82	16619
333 12:27:31	105.52	16620
333 14:08:46	80.20	16621
333 15:50:01	54.89	16622
333 17:31:15	29.58	16623
333 19:12:30	4.27	16624
333 20:53:44	-21.04	16625
333 22:34:59	-46.35	16626

333 01:28:30	-173.75	6073
333 03:10:37	160.72	6074
333 04:52:43	135.20	6075
333 06:34:49	109.68	6076
333 08:16:56	84.14	6077
333 09:59:02	58.62	6078
333 11:41:08	33.10	6079
333 13:23:15	7.56	6080
333 15:05:21	-17.96	6081
333 16:47:27	-43.48	6082
333 18:29:34	-69.01	6083
333 20:11:40	-94.53	6084
333 21:53:46	-120.06	6085
333 23:35:53	-145.59	6086

334 00:09:46	-107.08	25587
334 01:51:48	-132.58	25588
334 03:33:50	-158.09	25589
334 05:15:52	176.40	25590
334 06:57:54	150.89	25591
334 08:39:55	125.40	25592
334 10:21:57	99.89	25593
334 12:03:59	74.38	25594
334 13:46:01	48.88	25595
334 15:28:03	23.37	25596
334 17:10:05	-2.14	25597
334 18:52:06	-27.63	25598
334 20:34:08	-53.14	25599
334 22:16:10	-78.65	25600
334 23:58:12	-104.15	25601

334 00:16:14	-71.67	16627
334 01:57:28	-96.97	16628
334 03:38:43	-122.29	16629
334 05:19:58	-147.60	16630
334 07:01:12	-172.91	16631
334 08:42:27	161.78	16632
334 10:23:41	136.47	16633
334 12:04:56	111.16	16634
334 13:46:11	85.84	16635
334 15:27:25	60.54	16636
334 17:08:40	35.22	16637
334 18:49:54	9.92	16638
334 20:31:09	-15.40	16639
334 22:12:24	-40.72	16640
334 23:53:38	-66.02	16641

334 01:17:59	-171.11	6087
334 03:00:05	163.37	6088
334 04:42:12	137.83	6089
334 06:24:18	112.31	6090
334 08:06:24	86.79	6091
334 09:48:31	61.26	6092
334 11:30:37	35.73	6093
334 13:12:43	10.21	6094
334 14:54:50	-15.32	6095
334 16:36:56	-40.84	6096
334 18:19:02	-66.36	6097
334 20:01:09	-91.90	6098
334 21:43:15	-117.42	6099
334 23:25:21	-142.94	6100

335 01:40:14	-129.66	25602
335 03:22:16	-155.17	25603
335 05:04:18	179.32	25604
335 06:46:19	153.83	25605
335 08:28:21	128.32	25606
335 10:10:23	102.81	25607
335 11:52:25	77.31	25608
335 13:34:27	51.80	25609
335 15:16:29	26.29	25610
335 16:58:30	.80	25611
335 18:40:32	-24.71	25612
335 20:22:34	-50.22	25613
335 22:04:36	-75.72	25614
335 23:46:38	-101.23	25615

335 01:34:53	-91.34	16642
335 03:16:07	-116.64	16643
335 04:57:22	-141.96	16644
335 06:38:37	-167.27	16645
335 08:19:51	167.42	16646
335 10:01:06	142.11	16647
335 11:42:20	116.80	16648
335 13:23:35	91.49	16649
335 15:04:50	66.17	16650
335 16:46:04	40.87	16651
335 18:27:19	15.55	16652
335 20:08:33	-9.75	16653
335 21:49:48	-35.07	16654
335 23:31:03	-60.38	16655

335 01:07:28	-168.48	6101
335 02:49:34	166.00	6102
335 04:31:40	140.48	6103
335 06:13:47	114.95	6104
335 07:55:53	89.43	6105
335 09:37:59	63.91	6106
335 11:20:06	38.37	6107
335 13:02:12	12.85	6108
335 14:44:18	-12.67	6109
335 16:26:25	-38.21	6110
335 18:08:31	-63.73	6111
335 19:50:37	-89.25	6112
335 21:32:44	-114.78	6113
335 23:14:50	-140.31	6114

**SATELLITE C2**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

336 01:43:59	60.81	33561
336 03:28:51	34.47	33562
336 05:13:43	8.13	33563
336 06:58:35	-18.21	33564
336 08:43:27	-44.56	33565
336 10:28:19	-70.90	33566
336 12:13:11	-97.24	33567
336 13:58:03	-123.58	33568
336 15:42:55	-149.93	33569
336 17:27:47	-176.27	33570
336 19:12:39	157.39	33571
336 20:57:31	131.05	33572
336 22:42:23	104.71	33573

**SATELLITE C3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

336 01:21:48	116.26	27301
336 03:06:44	89.91	27302
336 04:51:39	63.55	27303
336 06:36:34	37.20	27304
336 08:21:29	10.84	27305
336 10:06:24	-15.52	27306
336 11:51:19	-41.87	27307
336 13:36:15	-68.22	27308
336 15:21:10	-94.58	27309
336 17:06:05	-120.94	27310
336 18:51:00	-147.29	27311
336 20:35:55	-173.65	27312
336 22:20:50	160.00	27313

**SATELLITE C4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

336 01:21:07	-20.79	2066
336 03:06:01	-47.14	2067
336 04:50:55	-73.49	2068
336 06:35:49	-99.84	2069
336 08:20:43	-126.19	2070
336 10:05:37	-152.54	2071
336 11:50:31	-178.89	2072
336 13:35:25	154.76	2073
336 15:20:19	128.40	2074
336 17:05:13	102.05	2075
336 18:50:07	75.70	2076
336 20:35:02	49.36	2077
336 22:19:56	23.00	2078

337 00:27:15	78.36	33574
337 02:12:07	52.02	33575
337 03:56:59	25.68	33576
337 05:41:51	-.66	33577
337 07:26:43	-27.01	33578
337 09:11:35	-53.35	33579
337 10:56:27	-79.69	33580
337 12:41:19	-106.03	33581
337 14:26:11	-132.38	33582
337 16:11:03	-158.72	33583
337 17:55:55	174.94	33584
337 19:40:47	148.60	33585
337 21:25:39	122.25	33586
337 23:10:31	95.91	33587

337 00:05:45	133.64	27314
337 01:50:41	107.29	27315
337 03:35:36	80.93	27316
337 05:20:31	54.58	27317
337 07:05:26	28.22	27318
337 08:50:21	1.87	27319
337 10:35:16	-24.49	27320
337 12:20:11	-50.85	27321
337 14:05:07	-77.20	27322
337 15:50:02	-103.55	27323
337 17:34:57	-129.91	27324
337 19:19:52	-156.27	27325
337 21:04:47	177.38	27326
337 22:49:42	151.02	27327

337 00:04:50	-3.35	2079
337 01:49:44	-29.70	2080
337 03:34:38	-56.05	2081
337 05:19:32	-82.40	2082
337 07:04:26	-108.75	2083
337 08:49:20	-135.10	2084
337 10:34:14	-161.45	2085
337 12:19:08	172.20	2086
337 14:04:02	145.85	2087
337 15:48:56	119.50	2088
337 17:33:50	93.15	2089
337 19:18:44	66.80	2090
337 21:03:38	40.45	2091
337 22:48:32	14.10	2092

338 00:55:23	69.57	33588
338 02:40:15	43.23	33589
338 04:25:07	16.89	33590
338 06:09:59	-9.46	33591
338 07:54:51	-35.80	33592
338 09:39:43	-62.14	33593
338 11:24:35	-88.48	33594
338 13:09:27	-114.83	33595
338 14:54:19	-141.17	33596
338 16:39:11	-167.51	33597
338 18:24:03	166.15	33598
338 20:08:55	139.80	33599
338 21:53:47	113.46	33600
338 23:38:39	87.12	33601

338 00:34:38	124.67	27328
338 02:19:33	98.31	27329
338 04:04:28	71.96	27330
338 05:49:23	45.60	27331
338 07:34:18	19.25	27332
338 09:19:13	-7.11	27333
338 11:04:08	-33.47	27334
338 12:49:04	-59.82	27335
338 14:33:59	-86.17	27336
338 16:18:54	-112.53	27337
338 18:03:49	-138.89	27338
338 19:48:44	-165.24	27339
338 21:33:39	168.40	27340
338 23:18:35	142.05	27341

338 00:33:26	-12.25	2093
338 02:18:20	-38.61	2094
338 04:03:14	-64.96	2095
338 05:48:08	-91.31	2096
338 07:33:02	-117.66	2097
338 09:17:56	-144.01	2098
338 11:02:50	-170.36	2099
338 12:47:44	163.29	2100
338 14:32:38	136.94	2101
338 16:17:32	110.59	2102
338 18:02:26	84.24	2103
338 19:47:20	57.89	2104
338 21:32:14	31.54	2105
338 23:17:08	5.19	2106

339 01:23:31	60.78	33602
339 03:08:23	34.43	33603
339 04:53:15	8.09	33604
339 06:38:07	-18.25	33605
339 08:22:59	-44.59	33606
339 10:07:51	-70.93	33607
339 11:52:43	-97.28	33608
339 13:37:35	-123.62	33609
339 15:22:27	-149.96	33610
339 17:07:19	-176.30	33611
339 18:52:11	157.35	33612
339 20:37:03	131.01	33613
339 22:21:55	104.67	33614

339 01:03:30	115.69	27342
339 02:48:25	89.34	27343
339 04:33:20	62.98	27344
339 06:18:15	36.63	27345
339 08:03:10	10.27	27346
339 09:48:05	-16.08	27347
339 11:33:01	-42.44	27348
339 13:17:56	-68.79	27349
339 15:02:51	-95.15	27350
339 16:47:46	-121.50	27351
339 18:32:41	-147.86	27352
339 20:17:36	-174.22	27353
339 22:02:31	159.43	27354
339 23:47:27	133.08	27355

339 01:02:02	-21.16	2107
339 02:46:56	-47.51	2108
339 04:31:50	-73.86	2109
339 06:16:44	-100.21	2110
339 08:01:38	-126.57	2111
339 09:46:32	-152.92	2112
339 11:31:26	-179.27	2113
339 13:16:20	154.38	2114
339 15:01:14	128.03	2115
339 16:46:08	101.68	2116
339 18:31:02	75.33	2117
339 20:15:56	48.98	2118
339 22:00:50	22.63	2119
339 23:45:44	-3.72	2120

SATELLITE S2								SATELLITE S3								SATELLITE S4											
Ascending Node Predictions								Ascending Node Predictions								Ascending Node Predictions											
Predicting for 182 days								Predicting for 183 days								Predicting for 183 days											
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg
336 01:28:40	-126.74	25616		336 01:12:17	-85.69	16656		336 00:56:56	-165.83	6115		336 02:39:03	168.64	6116													
336 03:10:41	-152.23	25617		336 02:53:32	-111.00	16657		336 02:27:28	66.54	6120		336 04:21:09	143.12	6117													
336 04:52:43	-177.74	25618		336 04:34:46	-136.31	16658		336 06:03:15	117.60	6118		336 06:03:15	117.60	6118													
336 06:34:45	156.75	25619		336 06:16:01	-161.62	16659		336 07:45:22	92.06	6119		336 06:16:01	-161.62	6119													
336 08:16:47	131.25	25620		336 07:57:16	173.06	16660		336 09:27:28	66.54	6120		336 09:38:30	147.76	16661													
336 09:58:49	105.74	25621		336 11:19:45	122.44	16662		336 11:09:34	41.02	6121		336 11:22:53	54.72	25623													
336 11:40:51	80.23	25622		336 13:00:59	97.14	16663		336 12:51:41	15.48	6122		336 15:04:54	29.23	25624													
336 13:22:53	54.72	25623		336 14:42:14	71.82	16664		336 14:33:47	-10.04	6123		336 16:46:56	3.72	25625													
336 15:04:54	29.23	25624		336 16:23:29	46.50	16665		336 16:15:53	-35.56	6124		336 18:28:58	-21.79	25626													
336 20:11:09	-47.29	25627		336 18:04:43	21.20	16666		336 17:58:00	-61.09	6125		336 21:53:02	-72.80	25628													
336 21:53:02	-72.80	25628		336 19:45:58	-4.12	16667		336 19:40:06	-86.61	6126		336 22:22:12	-112.13	6127													
336 23:35:04	-98.31	25629		336 21:27:12	-29.42	16668		336 23:04:19	-137.67	6128		336 23:08:27	-54.74	16669													
337 01:17:05	-123.80	25630		337 00:49:42	-80.05	16670		337 00:46:25	-163.19	6129		337 02:59:07	-149.31	25631													
337 04:41:09	-174.82	25632		337 02:30:56	-105.36	16671		337 02:28:31	171.29	6130		337 04:41:09	-174.82	25632													
337 06:23:11	159.68	25633		337 04:12:11	-130.67	16672		337 04:10:38	145.75	6131		337 06:23:11	159.68	25633													
337 08:05:13	134.17	25634		337 05:53:25	-155.98	16673		337 05:52:44	120.23	6132		337 08:05:13	134.17	25634													
337 09:47:15	108.66	25635		337 07:34:40	178.71	16674		337 07:34:50	94.71	6133		337 09:47:15	108.66	25635													
337 11:29:16	83.17	25636		337 09:15:55	153.39	16675		337 09:16:57	69.18	6134		337 11:29:16	83.17	25636													
337 13:11:18	57.66	25637		337 10:57:09	128.09	16676		337 10:59:03	43.65	6135		337 13:11:18	57.66	25637													
337 14:53:20	32.15	25638		337 12:38:24	102.77	16677		337 12:41:09	18.13	6136		337 14:53:20	32.15	25638													
337 16:35:22	6.65	25639		337 14:19:38	77.47	16678		337 14:23:16	-7.40	6137		337 16:35:22	6.65	25639													
337 18:17:24	-18.86	25640		337 16:00:53	52.15	16679		337 16:05:22	-32.92	6138		337 18:17:24	-18.86	25640													
337 19:59:26	-44.37	25641		337 17:42:08	26.84	16680		337 17:47:28	-58.44	6139		337 19:59:26	-44.37	25641													
337 21:41:27	-69.86	25642		337 19:23:22	1.53	16681		337 19:29:35	-83.98	6140		337 21:41:27	-69.86	25642													
337 23:23:29	-95.37	25643		337 21:04:37	-23.78	16682		337 21:11:41	-109.50	6141		337 23:23:29	-95.37	25643													
338 01:05:31	-120.88	25644		338 00:27:06	-74.40	16684		338 00:35:54	-160.56	6143		338 02:47:33	-146.39	25645													
338 04:29:35	-171.89	25646		338 02:08:21	-99.72	16685		338 02:18:00	173.92	6144		338 03:49:35	-125.02	16686													
338 06:11:37	162.60	25647		338 03:49:35	-150.34	16687		338 04:00:06	148.40	6145		338 05:30:50	-175.64	16688													
338 07:53:39	137.09	25648		338 05:30:50	159.04	16689		338 05:42:13	122.87	6146		338 07:12:04	133.72	16690													
338 09:35:40	111.60	25649		338 08:53:19	108.42	16691		338 07:24:19	97.35	6147		338 11:17:42	86.09	25650													
338 11:17:42	86.09	25650		338 10:34:34	108.42	16691		338 10:48:32	46.29	6149		338 12:59:44	60.58	25651													
338 14:41:46	35.08	25652		338 12:15:48	83.10	16692		338 12:30:38	20.77	6150		338 13:57:03	83.10	16692													
338 16:23:48	9.57	25653		338 15:38:17	57.80	16693		338 14:12:44	-4.75	6151		338 18:05:50	-15.94	25654													
338 19:47:51	-41.43	25655		338 17:19:32	32.48	16694		338 15:54:51	-30.29	6152		338 20:47:51	-41.43	25655													
338 21:29:53	-66.94	25656		338 19:00:47	7.17	16695		338 19:19:03	-81.33	6154		338 22:42:01	-18.14	16696													
338 23:11:55	-92.45	25657		338 22:23:16	-43.45	16697		338 21:01:10	-106.86	6155		338 00:04:30	-68.76	16698													
339 00:53:57	-117.96	25658		339 01:45:45	-94.07	16699		339 02:07:29	176.56	6158		339 04:18:01	-168.97	25660													
339 06:00:02	165.54	25661		339 03:27:00	-119.39	16700		339 03:49:35	151.04	6159		339 07:42:04	140.03	25662													
339 09:24:06	114.52	25663		339 05:08:14	-144.69	16701		339 05:31:41	125.52	6160		339 11:06:08	89.01	25664													
339 12:48:10	63.51	25665		339 06:49:29	-170.01	16702		339 08:55:54	74.46	6162		339 14:30:12	38.00	25666													
339 16:12:14	12.49	25667		339 08:30:43	164.69	16703		339 10:38:00	48.94	6163		339 17:54:15	-13.00	25668													
339 19:36:17	-38.51	25669		339 10:11:58	139.37	16704		339 12:20:07	23.40	6164		339 21:18:19	-64.02	25670													
339 23:00:21	-89.52	25671		339 11:53:13	114.05	16705		339 14:02:13	-2.12	6165		339 00:04:30	-68.76	16698													
339 23:41:55	-63.12	16712		339 13:34:27	88.75	16706		339 15:44:19	-27.64	6166		339 16:12:14	12.49	25667													
339 23:41:55	-63.12	16712		339 15:15:42	63.44	16707		339 17:26:26	-53.17	6167		339 16:56:56	38.13	16708													
339 23:41:55	-63.12	16712		339 16:56:56	38.13	16708		339 18:08:32	-78.69	6168		339 20:19:26	-12.50	16710													
339 23:41:55	-63.12	16712		339 22:00:40	-37.80	16711		339 20:50:38	-104.22	6169		339 22:32:45	-129.75	6170													

SATELLITE C2						SATELLITE C3						SATELLITE C4							
Ascending Node Predictions						Ascending Node Predictions						Ascending Node Predictions							
Predicting for 183 days						Predicting for 183 days						Predicting for 183 days							
TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg	TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg
340 00:06:47	78.33	33615		340 01:32:22	106.72	27356		340 01:30:38	-30.07	2121									
340 01:51:39	51.98	33616		340 03:17:17	80.36	27357		340 03:15:32	-56.42	2122									
340 03:36:31	25.64	33617		340 05:02:12	54.01	27358		340 05:00:27	-82.77	2123									
340 05:21:23	-70	33618		340 06:47:07	27.65	27359		340 06:45:21	-109.12	2124									
340 07:06:15	-27.04	33619		340 08:32:02	1.30	27360		340 08:30:15	-135.47	2125									
340 08:51:07	-53.39	33620		340 10:16:58	-25.06	27361		340 10:15:09	-161.82	2126									
340 10:35:59	-79.73	33621		340 12:01:53	-51.41	27362		340 12:00:03	171.83	2127									
340 12:20:51	-106.07	33622		340 13:46:48	-77.77	27363		340 13:44:57	145.48	2128									
340 14:05:44	-132.41	33623		340 15:31:43	-104.12	27364		340 15:29:51	119.13	2129									
340 15:50:36	-158.75	33624		340 17:16:38	-130.48	27365		340 17:14:45	92.78	2130									
340 17:35:28	174.91	33625		340 19:01:33	-156.84	27366		340 18:59:39	66.42	2131									
340 19:20:20	148.56	33626		340 20:46:28	176.81	27367		340 20:44:33	40.07	2132									
340 21:05:12	122.22	33627		340 22:31:24	150.46	27368		340 22:29:27	13.72	2133									
340 22:50:04	95.88	33628																	
341 00:34:56	69.54	33629		341 00:16:19	124.10	27369		341 00:14:21	-12.63	2134									
341 02:19:48	43.19	33630		341 02:01:14	97.74	27370		341 01:59:15	-38.98	2135									
341 04:04:40	16.85	33631		341 03:46:09	71.39	27371		341 03:44:09	-65.33	2136									
341 05:49:32	-9.49	33632		341 05:31:04	45.03	27372		341 05:29:03	-91.68	2137									
341 07:34:24	-35.83	33633		341 07:15:59	18.68	27373		341 07:13:57	-118.03	2138									
341 09:19:16	-62.18	33634		341 09:00:54	-7.68	27374		341 08:58:51	-144.38	2139									
341 11:04:08	-88.52	33635		341 10:45:50	-34.03	27375		341 10:43:45	-170.73	2140									
341 12:49:00	-114.86	33636		341 12:30:45	-60.39	27376		341 12:28:39	162.92	2141									
341 14:33:52	-141.20	33637		341 14:15:40	-86.74	27377		341 14:13:33	136.57	2142									
341 16:18:44	-167.55	33638		341 16:00:35	-113.10	27378		341 15:58:27	110.22	2143									
341 18:03:36	166.11	33639		341 17:45:30	-139.45	27379		341 17:43:21	83.87	2144									
341 19:48:28	139.77	33640		341 19:30:25	-165.81	27380		341 19:28:15	57.52	2145									
341 21:33:20	113.43	33641		341 21:15:21	167.84	27381		341 21:13:09	31.17	2146									
341 23:18:12	87.09	33642		341 23:00:16	141.48	27382		341 22:58:03	4.81	2147									
342 01:03:04	60.74	33643		342 00:45:11	115.13	27383		342 00:42:57	-21.54	2148									
342 02:47:56	34.40	33644		342 02:30:06	88.77	27384		342 02:27:51	-47.89	2149									
342 04:32:48	8.06	33645		342 04:15:01	62.41	27385		342 04:12:45	-74.24	2150									
342 06:17:40	-18.28	33646		342 05:59:56	36.06	27386		342 05:57:39	-100.59	2151									
342 08:02:32	-44.63	33647		342 07:44:51	9.70	27387		342 07:42:33	-126.94	2152									
342 09:47:24	-70.97	33648		342 09:29:47	-16.65	27388		342 09:27:27	-153.29	2153									
342 11:32:16	-97.31	33649		342 11:14:42	-43.01	27389		342 11:12:21	-179.64	2154									
342 13:17:08	-123.65	33650		342 12:59:37	-69.36	27390		342 12:57:15	154.01	2155									
342 15:02:00	-150.00	33651		342 14:44:32	-95.72	27391		342 14:42:09	127.66	2156									
342 16:46:52	-176.34	33652		342 16:29:27	-122.07	27392		342 16:27:03	101.31	2157									
342 18:31:44	157.32	33653		342 18:14:22	-148.43	27393		342 18:11:57	74.96	2158									
342 20:16:36	130.98	33654		342 19:59:17	-174.78	27394		342 19:56:51	48.61	2159									
342 22:01:28	104.63	33655		342 21:44:13	158.86	27395		342 21:41:45	22.26	2160									
342 23:46:20	78.29	33656		342 23:29:08	132.51	27396		342 23:26:39	-4.09	2161									
343 01:31:12	51.95	33657		343 01:14:03	106.15	27397		343 01:11:33	-30.45	2162									
343 03:16:04	25.61	33658		343 02:58:58	79.80	27398		343 02:56:27	-56.80	2163									
343 05:00:56	-74	33659		343 04:43:53	53.44	27399		343 04:41:22	-83.14	2164									
343 06:45:48	-27.08	33660		343 06:28:48	27.08	27400		343 06:26:16	-109.49	2165									
343 08:30:40	-53.42	33661		343 08:13:44	.73	27401		343 08:11:10	-135.84	2166									
343 10:15:32	-79.76	33662		343 09:58:39	-25.63	27402		343 09:56:04	-162.20	2167									
343 12:00:24	-106.10	33663		343 11:43:34	-51.98	27403		343 11:40:58	171.45	2168									
343 13:45:16	-132.45	33664		343 13:28:29	-78.34	27404		343 13:25:52	145.10	2169									
343 15:30:08	-158.79	33665		343 15:13:24	-104.69	27405		343 15:10:46	118.75	2170									
343 17:15:00	174.87	33666		343 16:58:19	-131.05	27406		343 16:55:40	92.40	2171									
343 18:59:52	148.53	33667		343 18:43:14	-157.40	27407		343 18:40:34	66.05	2172									
343 20:44:44	122.18	33668		343 20:28:10	176.24	27408		343 20:25:28	39.70	2173									
343 22:29:36	95.84	33669		343 22:13:05	149.89	27409		343 22:10:22	13.35	2174									
				343 23:58:00	123.53	27410		343 23:55:16	-13.00	2175									

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT
day	hr	mn	sc	day	hr	mn	sc	day	hr	mn	sc
deg	dg			deg	dg			deg	dg		
340 00:42:23	-115.03	25672	340 01:23:09	-88.42	16713	340 00:14:51	-155.27	6171			
340 02:24:25	-140.54	25673	340 03:04:24	-113.74	16714	340 01:56:57	179.21	6172			
340 04:06:26	-166.03	25674	340 04:45:39	-139.06	16715	340 03:39:04	153.67	6173			
340 05:48:28	168.46	25675	340 06:26:53	-164.36	16716	340 05:21:10	128.15	6174			
340 07:30:30	142.95	25676	340 08:08:08	170.32	16717	340 07:03:16	102.63	6175			
340 09:12:32	117.44	25677	340 09:49:22	145.02	16718	340 08:45:23	77.10	6176			
340 10:54:34	91.94	25678	340 11:30:37	119.70	16719	340 10:27:29	51.57	6177			
340 12:36:36	66.43	25679	340 13:11:52	94.39	16720	340 12:09:35	26.05	6178			
340 14:18:37	40.94	25680	340 14:53:06	69.08	16721	340 13:51:42	.52	6179			
340 16:00:39	15.43	25681	340 16:34:21	43.77	16722	340 15:33:48	-25.00	6180			
340 17:42:41	-10.08	25682	340 18:15:35	18.46	16723	340 17:15:54	-50.52	6181			
340 19:24:43	-35.59	25683	340 19:56:50	-6.85	16724	340 18:58:01	-76.06	6182			
340 21:06:45	-61.09	25684	340 21:38:05	-32.17	16725	340 20:40:07	-101.58	6183			
340 22:48:47	-86.60	25685	340 23:19:19	-57.47	16726	340 22:22:13	-127.10	6184			
341 00:30:49	-112.11	25686	341 01:00:34	-82.79	16727	341 00:04:20	-152.64	6185			
341 02:12:50	-137.60	25687	341 02:41:48	-108.09	16728	341 01:46:26	-178.16	6186			
341 03:54:52	-163.11	25688	341 04:23:03	-133.41	16729	341 03:28:32	156.32	6187			
341 05:36:54	171.38	25689	341 06:04:18	-158.73	16730	341 05:10:39	130.79	6188			
341 07:18:56	145.88	25690	341 07:45:32	175.97	16731	341 06:52:45	105.27	6189			
341 09:00:58	120.37	25691	341 09:26:47	150.65	16732	341 08:34:51	79.74	6190			
341 10:43:00	94.86	25692	341 11:08:01	125.35	16733	341 10:16:58	54.21	6191			
341 12:25:01	69.37	25693	341 12:49:16	100.03	16734	341 11:59:04	28.69	6192			
341 14:07:03	43.86	25694	341 14:30:31	74.72	16735	341 13:41:10	3.17	6193			
341 15:49:05	18.35	25695	341 16:11:45	49.41	16736	341 15:23:17	-22.37	6194			
341 17:31:07	-7.16	25696	341 17:53:00	24.10	16737	341 17:05:23	-47.89	6195			
341 19:13:09	-32.66	25697	341 19:34:14	-1.20	16738	341 18:47:29	-73.41	6196			
341 20:55:11	-58.17	25698	341 21:15:29	-26.52	16739	341 20:29:36	-98.94	6197			
341 22:37:12	-83.66	25699	341 22:56:44	-51.84	16740	341 22:11:42	-124.47	6198			
341 23:53:48						341 23:53:48	-149.99	6199			
342 00:19:14	-109.17	25700	342 00:37:58	-77.14	16741	342 01:35:54	-175.51	6200			
342 02:01:16	-134.68	25701	342 02:19:13	-102.46	16742	342 03:18:01	158.96	6201			
342 03:43:18	-160.19	25702	342 04:00:27	-127.76	16743	342 05:00:07	133.44	6202			
342 05:25:20	174.31	25703	342 05:41:42	-153.08	16744	342 06:42:13	107.91	6203			
342 07:07:22	148.80	25704	342 07:22:57	-178.39	16745	342 08:24:20	82.38	6204			
342 08:49:24	123.29	25705	342 09:04:11	156.30	16746	342 10:06:26	56.86	6205			
342 10:31:25	97.80	25706	342 10:45:26	130.99	16747	342 11:48:32	31.34	6206			
342 12:13:27	72.29	25707	342 12:26:40	105.68	16748	342 13:30:39	5.80	6207			
342 13:55:29	46.78	25708	342 14:07:55	80.37	16749	342 15:12:45	-19.72	6208			
342 15:37:31	21.28	25709	342 15:49:10	55.05	16750	342 16:54:51	-45.24	6209			
342 17:19:33	-4.23	25710	342 17:30:24	29.75	16751	342 18:36:58	-70.77	6210			
342 19:01:35	-29.74	25711	342 19:11:39	4.43	16752	342 20:19:04	-96.30	6211			
342 20:43:36	-55.23	25712	342 20:52:53	-20.87	16753	342 22:01:10	-121.82	6212			
342 22:25:38	-80.74	25713	342 22:34:08	-46.19	16754	342 23:43:17	-147.35	6213			
343 00:07:40	-106.25	25714	343 00:15:23	-71.51	16755	343 01:25:23	-172.87	6214			
343 01:49:42	-131.76	25715	343 01:56:37	-96.81	16756	343 03:07:29	161.61	6215			
343 03:31:44	-157.26	25716	343 03:37:52	-122.13	16757	343 04:49:36	136.07	6216			
343 05:13:46	177.23	25717	343 05:19:06	-147.43	16758	343 06:31:42	110.55	6217			
343 06:55:47	151.74	25718	343 07:00:21	-172.75	16759	343 08:13:48	85.03	6218			
343 08:37:49	126.23	25719	343 08:41:36	161.94	16760	343 09:55:55	59.49	6219			
343 10:19:51	100.72	25720	343 10:22:50	136.63	16761	343 11:38:01	33.97	6220			
343 12:01:53	75.21	25721	343 12:04:05	111.32	16762	343 13:20:07	8.45	6221			
343 13:43:55	49.71	25722	343 13:45:19	86.01	16763	343 15:02:14	-17.08	6222			
343 15:25:57	24.20	25723	343 15:26:34	60.70	16764	343 16:44:20	-42.60	6223			
343 17:07:59	-1.31	25724	343 17:07:49	35.38	16765	343 18:26:26	-68.13	6224			
343 18:50:00	-26.80	25725	343 18:49:03	10.08	16766	343 20:08:33	-93.66	6225			
343 20:32:02	-52.31	25726	343 20:30:18	-15.24	16767	343 21:50:39	-119.18	6226			
343 22:14:04	-77.82	25727	343 22:11:32	-40.54	16768	343 23:32:45	-144.70	6227			
343 23:56:06	-103.33	25728	343 23:52:47	-65.86	16769						

**SATELLITE C2**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

344 00:14:28	69.50	33670
344 01:59:20	43.16	33671
344 03:44:12	16.81	33672
344 05:29:04	-9.53	33673
344 07:13:56	-35.87	33674
344 08:58:48	-62.21	33675
344 10:43:40	-88.56	33676
344 12:28:32	-114.90	33677
344 14:13:24	-141.24	33678
344 15:58:16	-167.58	33679
344 17:43:08	166.07	33680
344 19:28:00	139.73	33681
344 21:12:52	113.39	33682
344 22:57:44	87.05	33683

**SATELLITE C3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

344 01:42:55	97.18	27411
344 03:27:50	70.82	27412
344 05:12:45	44.46	27413
344 06:57:40	18.11	27414
344 08:42:36	-8.24	27415
344 10:27:31	-34.60	27416
344 12:12:26	-60.96	27417
344 13:57:21	-87.31	27418
344 15:42:16	-113.67	27419
344 17:27:11	-140.02	27420
344 19:12:06	-166.38	27421
344 20:57:02	167.27	27422
344 22:41:57	140.91	27423

**SATELLITE C4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

344 01:40:10	-39.35	2176
344 03:25:04	-65.70	2177
344 05:09:58	-92.05	2178
344 06:54:52	-118.40	2179
344 08:39:46	-144.75	2180
344 10:24:40	-171.10	2181
344 12:09:34	162.54	2182
344 13:54:28	136.19	2183
344 15:39:22	109.84	2184
344 17:24:16	83.49	2185
344 19:09:10	57.14	2186
344 20:54:04	30.79	2187
344 22:38:58	4.44	2188

345 00:42:36	60.71	33684
345 02:27:28	34.36	33685
345 04:12:20	8.02	33686
345 05:57:12	-18.32	33687
345 07:42:04	-44.66	33688
345 09:26:56	-71.01	33689
345 11:11:48	-97.35	33690
345 12:56:40	-123.69	33691
345 14:41:32	-150.03	33692
345 16:26:24	-176.38	33693
345 18:11:16	157.28	33694
345 19:56:08	130.94	33695
345 21:41:00	104.60	33696
345 23:25:52	78.25	33697

345 00:26:52	114.56	27424
345 02:11:47	88.20	27425
345 03:56:42	61.85	27426
345 05:41:37	35.49	27427
345 07:26:33	9.14	27428
345 09:11:28	-17.22	27429
345 10:56:23	-43.57	27430
345 12:41:18	-69.93	27431
345 14:26:13	-96.29	27432
345 16:11:08	-122.64	27433
345 17:56:03	-149.00	27434
345 19:40:59	-175.35	27435
345 21:25:54	158.29	27436
345 23:10:49	131.94	27437

345 00:23:52	-21.91	2189
345 02:08:46	-48.26	2190
345 03:53:40	-74.61	2191
345 05:38:34	-100.96	2192
345 07:23:28	-127.31	2193
345 09:08:22	-153.66	2194
345 10:53:16	179.99	2195
345 12:38:10	153.64	2196
345 14:23:04	127.29	2197
345 16:07:58	100.93	2198
345 17:52:52	74.58	2199
345 19:37:46	48.23	2200
345 21:22:40	21.88	2201
345 23:07:34	-4.47	2202

346 01:10:44	51.91	33698
346 02:55:36	25.57	33699
346 04:40:28	-77	33700
346 06:25:20	-27.12	33701
346 08:10:12	-53.46	33702
346 09:55:04	-79.80	33703
346 11:39:56	-106.14	33704
346 13:24:48	-132.49	33705
346 15:09:40	-158.83	33706
346 16:54:32	174.83	33707
346 18:39:24	148.49	33708
346 20:24:16	122.15	33709
346 22:09:08	95.80	33710
346 23:54:00	69.46	33711

346 00:55:44	105.58	27438
346 02:40:39	79.23	27439
346 04:25:34	52.87	27440
346 06:10:29	26.52	27441
346 07:55:25	.16	27442
346 09:40:20	-26.19	27443
346 11:25:15	-52.55	27444
346 13:10:10	-78.90	27445
346 14:55:05	-105.26	27446
346 16:40:00	-131.62	27447
346 18:24:55	-157.97	27448
346 20:09:51	175.68	27449
346 21:54:46	149.32	27450
346 23:39:41	122.96	27451

346 00:52:29	-30.82	2203
346 02:37:23	-57.17	2204
346 04:22:17	-83.52	2205
346 06:07:11	-109.87	2206
346 07:52:05	-136.22	2207
346 09:36:59	-162.57	2208
346 11:21:53	171.08	2209
346 13:06:47	144.73	2210
346 14:51:41	118.38	2211
346 16:36:35	92.03	2212
346 18:21:29	65.68	2213
346 20:06:23	39.33	2214
346 21:51:17	12.98	2215
346 23:36:11	-13.37	2216

347 01:38:52	43.12	33712
347 03:23:44	16.78	33713
347 05:08:36	-9.57	33714
347 06:53:28	-35.91	33715
347 08:38:21	-62.25	33716
347 10:23:13	-88.59	33717
347 12:08:05	-114.93	33718
347 13:52:57	-141.28	33719
347 15:37:49	-167.62	33720
347 17:22:41	166.04	33721
347 19:07:33	139.70	33722
347 20:52:25	113.35	33723
347 22:37:17	87.01	33724

347 01:24:36	96.61	27452
347 03:09:31	70.25	27453
347 04:54:26	43.90	27454
347 06:39:21	17.54	27455
347 08:24:17	-8.81	27456
347 10:09:12	-35.17	27457
347 11:54:07	-61.52	27458
347 13:39:02	-87.88	27459
347 15:23:57	-114.23	27460
347 17:08:52	-140.59	27461
347 18:53:47	-166.95	27462
347 20:38:43	166.70	27463
347 22:23:38	140.35	27464

347 01:21:05	-39.73	2217
347 03:05:59	-66.08	2218
347 04:50:53	-92.43	2219
347 06:35:47	-118.78	2220
347 08:20:41	-145.13	2221
347 10:05:35	-171.48	2222
347 11:50:29	162.17	2223
347 13:35:23	135.82	2224
347 15:20:17	109.47	2225
347 17:05:11	83.12	2226
347 18:50:05	56.77	2227
347 20:34:59	30.42	2228
347 22:19:53	4.07	2229

**SATELLITE S2**

**Ascending Node Predictions**  
**Predicting for 182 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

344	01:38:08	-128.83	25729
344	03:20:10	-154.34	25730
344	05:02:11	-179.83	25731
344	06:44:13	154.66	25732
344	08:26:15	129.15	25733
344	10:08:17	103.64	25734
344	11:50:19	78.14	25735
344	13:32:21	52.63	25736
344	15:14:22	27.14	25737
344	16:56:24	1.63	25738
344	18:38:26	-23.88	25739
344	20:20:28	-49.39	25740
344	22:02:30	-74.89	25741
344	23:44:32	-100.40	25742

**SATELLITE S3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

344	01:34:02	-91.17	16770
344	03:15:16	-116.48	16771
344	04:56:31	-141.79	16772
344	06:37:45	-167.10	16773
344	08:19:00	167.59	16774
344	10:00:15	142.27	16775
344	11:41:29	116.97	16776
344	13:22:44	91.65	16777
344	15:03:58	66.35	16778
344	16:45:13	41.03	16779
344	18:26:28	15.71	16780
344	20:07:42	-9.59	16781
344	21:48:57	-34.91	16782
344	23:30:11	-60.21	16783

**SATELLITE S4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

344	01:14:52	-170.24	6228
344	02:56:58	164.24	6229
344	04:39:04	138.72	6230
344	06:21:11	113.18	6231
344	08:03:17	87.66	6232
344	09:45:23	62.14	6233
344	11:27:30	36.61	6234
344	13:09:36	11.09	6235
344	14:51:42	-14.44	6236
344	16:33:49	-39.97	6237
344	18:15:55	-65.49	6238
344	19:58:01	-91.01	6239
344	21:40:08	-116.55	6240
344	23:22:14	-142.07	6241

345	01:26:33	-125.90	25743
345	03:08:35	-151.40	25744
345	04:50:37	-176.91	25745
345	06:32:39	157.58	25746
345	08:14:41	132.07	25747
345	09:56:43	106.57	25748
345	11:38:45	81.06	25749
345	13:20:46	55.57	25750
345	15:02:48	30.06	25751
345	16:44:50	4.55	25752
345	18:26:52	-20.96	25753
345	20:08:54	-46.46	25754
345	21:50:56	-71.97	25755
345	23:32:57	-97.46	25756

345	01:11:26	-85.53	16784
345	02:52:41	-110.84	16785
345	04:33:55	-136.15	16786
345	06:15:10	-161.46	16787
345	07:56:24	173.23	16788
345	09:37:39	147.92	16789
345	11:18:54	122.60	16790
345	13:00:08	97.30	16791
345	14:41:23	71.98	16792
345	16:22:37	46.68	16793
345	18:03:52	21.36	16794
345	19:45:07	-3.96	16795
345	21:26:21	-29.26	16796
345	23:07:36	-54.58	16797

345	01:04:20	-167.59	6242
345	02:46:27	166.88	6243
345	04:28:33	141.35	6244
345	06:10:39	115.83	6245
345	07:52:46	90.30	6246
345	09:34:52	64.78	6247
345	11:16:58	39.26	6248
345	12:59:05	13.72	6249
345	14:41:11	-11.80	6250
345	16:23:17	-37.32	6251
345	18:05:24	-62.86	6252
345	19:47:30	-88.38	6253
345	21:29:36	-113.90	6254
345	23:11:43	-139.43	6255

346	01:14:59	-122.97	25757
346	02:57:01	-148.48	25758
346	04:39:03	-173.99	25759
346	06:21:05	160.51	25760
346	08:03:07	135.00	25761
346	09:45:08	109.50	25762
346	11:27:10	84.00	25763
346	13:09:12	58.49	25764
346	14:51:14	32.98	25765
346	16:33:16	7.47	25766
346	18:15:18	-18.03	25767
346	19:57:20	-43.54	25768
346	21:39:21	-69.03	25769
346	23:21:23	-94.54	25770

346	00:48:50	-79.88	16798
346	02:30:05	-105.20	16799
346	04:11:20	-130.51	16800
346	05:52:34	-155.82	16801
346	07:33:49	178.87	16802
346	09:15:03	153.56	16803
346	10:56:18	128.25	16804
346	12:37:33	102.93	16805
346	14:18:47	77.63	16806
346	16:00:02	52.31	16807
346	17:41:16	27.01	16808
346	19:22:31	1.69	16809
346	21:03:46	-23.62	16810
346	22:45:00	-48.93	16811

346	00:53:49	-164.95	6256
346	02:35:55	169.52	6257
346	04:18:02	143.99	6258
346	06:00:08	118.47	6259
346	07:42:14	92.95	6260
346	09:24:21	67.41	6261
346	11:06:27	41.89	6262
346	12:48:33	16.37	6263
346	14:30:40	-9.16	6264
346	16:12:46	-34.69	6265
346	17:54:52	-60.21	6266
346	19:36:59	-85.74	6267
346	21:19:05	-111.26	6268
346	23:01:11	-136.78	6269

347	01:03:25	-120.05	25771
347	02:45:27	-145.56	25772
347	04:27:29	-171.06	25773
347	06:09:31	163.43	25774
347	07:51:32	137.93	25775
347	09:33:34	112.43	25776
347	11:15:36	86.92	25777
347	12:57:38	61.41	25778
347	14:39:40	35.91	25779
347	16:21:42	10.40	25780
347	18:03:43	-15.10	25781
347	19:45:45	-40.60	25782
347	21:27:47	-66.11	25783
347	23:09:49	-91.62	25784

347	00:26:15	-74.24	16812
347	02:07:29	-99.55	16813
347	03:48:44	-124.86	16814
347	05:29:58	-150.17	16815
347	07:11:13	-175.48	16816
347	08:52:28	159.20	16817
347	10:33:42	133.90	16818
347	12:14:57	108.58	16819
347	13:56:11	83.28	16820
347	15:37:26	57.96	16821
347	17:18:41	32.64	16822
347	18:59:55	7.34	16823
347	20:41:10	-17.98	16824
347	22:22:24	-43.28	16825

347	00:43:18	-162.32	6270
347	02:25:24	172.16	6271
347	04:07:30	146.64	6272
347	05:49:37	121.10	6273
347	07:31:43	95.58	6274
347	09:13:49	70.06	6275
347	10:55:56	44.53	6276
347	12:38:02	19.00	6277
347	14:20:08	-6.52	6278
347	16:02:15	-32.05	6279
347	17:44:21	-57.57	6280
347	19:26:27	-83.09	6281
347	21:08:34	-108.63	6282
347	22:50:40	-134.15	6283

**SATELLITE C2****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

348 00:22:09	60.67	33725
348 02:07:01	34.33	33726
348 03:51:53	7.98	33727
348 05:36:45	-18.36	33728
348 07:21:37	-44.70	33729
348 09:06:29	-71.04	33730
348 10:51:21	-97.39	33731
348 12:36:13	-123.73	33732
348 14:21:05	-150.07	33733
348 16:05:57	-176.41	33734
348 17:50:49	157.25	33735
348 19:35:41	130.90	33736
348 21:20:33	104.56	33737
348 23:05:25	78.22	33738

**SATELLITE C3****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

348 00:08:33	113.99	27465
348 01:53:28	87.63	27466
348 03:38:23	61.28	27467
348 05:23:18	34.92	27468
348 07:08:14	8.57	27469
348 08:53:09	-17.79	27470
348 10:38:04	-44.14	27471
348 12:22:59	-70.50	27472
348 14:07:54	-96.85	27473
348 15:52:49	-123.21	27474
348 17:37:44	-149.56	27475
348 19:22:40	-175.92	27476
348 21:07:35	157.73	27477
348 22:52:30	131.37	27478

**SATELLITE C4****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

348 00:04:47	-22.28	2230
348 01:49:41	-48.63	2231
348 03:34:35	-74.99	2232
348 05:19:29	-101.34	2233
348 07:04:23	-127.69	2234
348 08:49:17	-154.04	2235
348 10:34:11	179.61	2236
348 12:19:05	153.26	2237
348 14:03:59	126.91	2238
348 15:48:53	100.56	2239
348 17:33:48	74.21	2240
348 19:18:42	47.86	2241
348 21:03:36	21.51	2242
348 22:48:30	-4.84	2243

349 00:50:17	51.88	33739
349 02:35:09	25.53	33740
349 04:20:01	- .81	33741
349 06:04:53	-27.15	33742
349 07:49:45	-53.49	33743
349 09:34:37	-79.84	33744
349 11:19:29	-106.18	33745
349 13:04:21	-132.52	33746
349 14:49:13	-158.86	33747
349 16:34:05	174.79	33748
349 18:18:57	148.45	33749
349 20:03:49	122.11	33750
349 21:48:41	95.77	33751
349 23:33:33	69.42	33752

349 00:37:25	105.02	27479
349 02:22:20	78.66	27480
349 04:07:15	52.30	27481
349 05:52:10	25.95	27482
349 07:37:06	- .40	27483
349 09:22:01	-26.76	27484
349 11:06:56	-53.12	27485
349 12:51:51	-79.47	27486
349 14:36:46	-105.83	27487
349 16:21:41	-132.18	27488
349 18:06:36	-158.54	27489
349 19:51:32	175.11	27490
349 21:36:27	148.75	27491
349 23:21:22	122.40	27492

349 00:33:24	-31.19	2244
349 02:18:18	-57.54	2245
349 04:03:12	-83.89	2246
349 05:48:06	-110.24	2247
349 07:33:00	-136.59	2248
349 09:17:54	-162.94	2249
349 11:02:48	170.71	2250
349 12:47:42	144.36	2251
349 14:32:36	118.00	2252
349 16:17:30	91.65	2253
349 18:02:24	65.30	2254
349 19:47:18	38.95	2255
349 21:32:12	12.60	2256
349 23:17:06	-13.75	2257

350 01:18:25	43.08	33753
350 03:03:17	16.74	33754
350 04:48:09	-9.60	33755
350 06:33:01	-35.95	33756
350 08:17:53	-62.29	33757
350 10:02:45	-88.63	33758
350 11:47:37	-114.97	33759
350 13:32:29	-141.32	33760
350 15:17:21	-167.66	33761
350 17:02:13	166.00	33762
350 18:47:05	139.66	33763
350 20:31:57	113.31	33764
350 22:16:49	86.97	33765

350 01:06:17	96.04	27493
350 02:51:12	69.69	27494
350 04:36:07	43.33	27495
350 06:21:02	16.97	27496
350 08:05:58	-9.38	27497
350 09:50:53	-35.73	27498
350 11:35:48	-62.09	27499
350 13:20:43	-88.45	27500
350 15:05:38	-114.80	27501
350 16:50:33	-141.16	27502
350 18:35:28	-167.51	27503
350 20:20:24	166.13	27504
350 22:05:19	139.78	27505
350 23:50:14	113.42	27506

350 01:02:00	-40.10	2258
350 02:46:54	-66.45	2259
350 04:31:48	-92.80	2260
350 06:16:42	-119.15	2261
350 08:01:36	-145.50	2262
350 09:46:30	-171.85	2263
350 11:31:24	161.80	2264
350 13:16:18	135.45	2265
350 15:01:12	109.10	2266
350 16:46:06	82.74	2267
350 18:31:00	56.39	2268
350 20:15:54	30.04	2269
350 22:00:48	3.69	2270
350 23:45:42	-22.66	2271

351 00:01:41	60.63	33766
351 01:46:33	34.29	33767
351 03:31:25	7.94	33768
351 05:16:17	-18.40	33769
351 07:01:09	-44.74	33770
351 08:46:01	-71.08	33771
351 10:30:53	-97.43	33772
351 12:15:45	-123.77	33773
351 14:00:37	-150.11	33774
351 15:45:29	-176.45	33775
351 17:30:22	157.21	33776
351 19:15:14	130.87	33777
351 21:00:06	104.52	33778
351 22:44:58	78.18	33779

351 01:35:09	87.07	27507
351 03:20:04	60.71	27508
351 05:04:59	34.36	27509
351 06:49:54	8.00	27510
351 08:34:50	-18.35	27511
351 10:19:45	-44.71	27512
351 12:04:40	-71.06	27513
351 13:49:35	-97.42	27514
351 15:34:30	-123.78	27515
351 17:19:25	-150.13	27516
351 19:04:20	-176.49	27517
351 20:49:16	157.16	27518
351 22:34:11	130.80	27519

351 01:30:36	-49.01	2272
351 03:15:30	-75.36	2273
351 05:00:24	-101.71	2274
351 06:45:18	-128.06	2275
351 08:30:17	-154.91	2276
351 10:15:07	179.24	2277
351 12:00:01	152.89	2278
351 13:44:55	126.54	2279
351 15:29:49	100.19	2280
351 17:14:43	73.84	2281
351 18:59:37	47.49	2282
351 20:44:31	21.14	2283
351 22:29:25	-5.21	2284

SATELLITE S2							SATELLITE S3							SATELLITE S4							
Ascending Node Predictions							Ascending Node Predictions							Ascending Node Predictions							
Predicting for 182 days							Predicting for 183 days							Predicting for 183 days							
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg	day	hr	mn	sc
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc
348 00:51:51	-117.13	25785	348 00:03:39	-68.60	16826	348 00:32:46	-159.67	6284	348 02:33:53	-142.63	25786	348 02:14:53	174.79	6285	348 02:22:00	115.35	25790	348 03:56:59	149.27	6286	
348 04:15:55	-168.14	25787	348 01:44:54	-93.91	16827	348 05:39:05	123.75	6287	348 05:57:56	166.37	25788	348 05:07:23	-144.53	16829	348 07:21:12	98.22	6288				
348 07:39:58	140.86	25789	348 06:48:37	-169.84	16830	348 09:03:18	72.70	6289	348 09:22:00	115.35	25790	348 08:29:52	164.85	16831	348 10:45:24	47.17	6290				
348 11:04:02	89.84	25791	348 10:11:07	139.53	16832	348 12:27:31	21.64	6291	348 12:46:04	64.34	25792	348 11:52:21	114.23	16833	348 14:09:37	-3.88	6292				
348 14:28:06	38.83	25793	348 13:33:36	88.91	16834	348 15:51:43	-29.40	6293	348 16:10:07	13.33	25794	348 15:14:50	63.61	16835	348 17:33:49	-54.92	6294				
348 17:52:09	-12.17	25795	348 16:56:05	38.29	16836	348 19:15:56	-80.46	6295	348 19:34:11	-37.68	25796	348 18:37:20	12.97	16837	348 20:58:02	-105.98	6296				
348 21:16:13	-63.19	25797	348 20:18:34	-12.33	16838	348 22:40:08	-131.50	6297	348 22:58:15	-88.70	25798	348 21:59:49	-37.65	16839	348 23:41:03	-62.95	16840				
349 00:40:17	-114.20	25799	349 01:22:18	-88.27	16841	349 00:22:15	-157.04	6298	349 02:22:18	-139.70	25800	349 03:03:33	-113.58	16842	349 02:04:21	177.44	6299				
349 04:04:20	-165.20	25801	349 04:44:47	-138.89	16843	349 03:46:27	151.92	6300	349 05:46:22	169.29	25802	349 06:26:02	-164.20	16844	349 05:28:34	126.39	6301				
349 07:28:24	143.78	25803	349 08:07:16	170.49	16845	349 07:04:40	100.86	6302	349 09:10:26	118.27	25804	349 09:48:31	145.18	16846	349 08:52:46	75.34	6303				
349 10:52:28	92.77	25805	349 11:29:46	119.86	16847	349 10:34:53	49.81	6304	349 12:34:30	67.26	25806	349 13:11:00	94.56	16848	349 12:16:59	24.29	6305				
349 14:16:31	41.77	25807	349 14:52:15	69.24	16849	349 13:59:05	-1.23	6306	349 15:58:33	16.26	25808	349 16:33:29	43.94	16850	349 15:41:12	-26.77	6307				
349 17:40:35	-9.25	25809	349 18:14:44	18.62	16851	349 17:23:18	-52.29	6308	349 19:22:37	-34.76	25810	349 19:55:59	-6.69	16852	349 19:05:24	-77.81	6309				
349 21:04:39	-60.26	25811	349 21:37:13	-32.00	16853	349 20:47:31	-103.35	6310	349 22:46:41	-85.77	25812	349 23:18:28	-57.31	16854	349 22:29:37	-128.87	6311				
350 00:28:42	-111.27	25813	350 00:59:42	-82.62	16855	350 00:11:43	-154.39	6312	350 02:10:44	-136.77	25814	350 02:40:57	-107.93	16856	350 01:53:50	-179.92	6313				
350 03:52:46	-162.28	25815	350 04:22:12	-133.25	16857	350 03:35:56	154.56	6314	350 05:34:48	172.21	25816	350 06:03:26	-158.55	16858	350 05:18:02	129.03	6315				
350 07:16:50	146.70	25817	350 07:44:41	176.13	16859	350 07:00:09	103.50	6316	350 08:58:52	121.20	25818	350 09:25:55	150.83	16860	350 08:42:15	77.98	6317				
350 10:40:53	95.70	25819	350 11:07:10	125.51	16861	350 10:24:21	52.46	6318	350 12:22:55	70.20	25820	350 12:48:25	100.19	16862	350 12:06:28	26.92	6319				
350 14:04:57	44.69	25821	350 14:29:39	74.89	16863	350 13:48:34	1.40	6320	350 15:46:59	19.18	25822	350 16:10:54	49.57	16864	350 15:30:40	-24.12	6321				
350 17:29:01	-6.33	25823	350 17:52:08	24.27	16865	350 17:12:47	-49.65	6322	350 19:11:03	-31.83	25824	350 19:33:23	-1.05	16866	350 18:54:53	-75.18	6323				
350 20:53:04	-57.33	25825	350 21:14:37	-26.35	16867	350 20:36:59	-100.70	6324	350 22:35:06	-82.84	25826	350 22:55:52	-51.67	16868	350 22:19:06	-126.23	6325				
351 00:17:08	-108.34	25827	351 00:37:07	-76.98	16869	351 00:01:12	-151.75	6326	351 01:59:10	-133.85	25828	351 02:18:21	-102.29	16870	351 01:43:18	-177.27	6327				
351 03:41:12	-159.36	25829	351 03:59:36	-127.60	16871	351 03:25:25	157.19	6328	351 05:23:14	175.14	25830	351 05:40:50	-152.91	16872	351 05:07:31	131.67	6329				
351 07:05:16	149.63	25831	351 07:22:05	-178.22	16873	351 06:49:37	106.15	6330	351 08:47:17	124.13	25832	351 09:03:20	156.46	16874	351 08:31:44	80.61	6331				
351 10:29:19	98.63	25833	351 10:44:34	131.16	16875	351 10:13:50	55.09	6332	351 12:11:21	73.12	25834	351 12:25:49	105.84	16876	351 11:55:56	29.57	6333				
351 13:53:23	47.61	25835	351 14:07:03	80.54	16877	351 13:38:03	4.04	6334	351 15:35:25	22.10	25836	351 15:48:18	55.22	16878	351 15:20:09	-21.49	6335				
351 17:17:27	-3.40	25837	351 17:29:33	29.90	16879	351 17:02:15	-47.01	6336	351 18:59:28	-28.90	25838	351 19:10:47	4.60	16880	351 18:44:22	-72.54	6337				
351 20:41:30	-54.40	25839	351 20:52:02	-20.72	16881	351 20:26:28	-98.06	6338	351 22:23:32	-79.91	25840	351 22:33:16	-46.02	16882	351 22:08:34	-123.58	6339				

SATELLITE C2							
Ascending Node Predictions							
Predicting for 183 days							
TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc
	deg	dg					
352 00:29:50	51.84	33780					
352 02:14:42	25.50	33781					
352 03:59:34	- .85	33782					
352 05:44:26	-27.19	33783					
352 07:29:18	-53.53	33784					
352 09:14:10	-79.87	33785					
352 10:59:02	-106.22	33786					
352 12:43:54	-132.56	33787					
352 14:28:46	-158.90	33788					
352 16:13:38	174.76	33789					
352 17:58:30	148.41	33790					
352 19:43:22	122.07	33791					
352 21:28:14	95.73	33792					
352 23:13:06	69.39	33793					

SATELLITE C3							
Ascending Node Predictions							
Predicting for 183 days							
TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc
	deg	dg					
352 00:19:06	104.45	27520					
352 02:04:01	78.09	27521					
352 03:48:56	51.74	27522					
352 05:33:51	25.38	27523					
352 07:18:46	- .97	27524					
352 09:03:41	-27.33	27525					
352 10:48:37	-53.68	27526					
352 12:33:32	-80.04	27527					
352 14:18:27	-106.39	27528					
352 16:03:22	-132.75	27529					
352 17:48:17	-159.11	27530					
352 19:33:12	174.54	27531					
352 21:18:07	148.18	27532					
352 23:03:03	121.83	27533					

SATELLITE C4							
Ascending Node Predictions							
Predicting for 183 days							
TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc
	deg	dg					
352 00:14:19	-31.56	2285					
352 01:59:13	-57.92	2286					
352 03:44:07	-84.27	2287					
352 05:29:01	-110.62	2288					
352 07:13:55	-136.97	2289					
352 08:58:49	-163.32	2290					
352 10:43:43	170.33	2291					
352 12:28:37	143.98	2292					
352 14:13:31	117.63	2293					
352 15:58:25	91.28	2294					
352 17:43:19	64.93	2295					
352 19:28:13	38.58	2296					
352 21:13:07	12.23	2297					
352 22:58:01	-14.12	2298					

353 00:57:58	43.04	33794
353 02:42:50	16.70	33795
353 04:27:42	-9.64	33796
353 06:12:34	-35.98	33797
353 07:57:26	-62.33	33798
353 09:42:18	-88.67	33799
353 11:27:10	-115.01	33800
353 13:12:02	-141.35	33801
353 14:56:54	-167.70	33802
353 16:41:46	165.96	33803
353 18:26:38	139.62	33804
353 20:11:30	113.28	33805
353 21:56:22	86.93	33806
353 23:41:14	60.59	33807

353 00:47:58	95.47	27534
353 02:32:53	69.12	27535
353 04:17:48	42.76	27536
353 06:02:43	16.41	27537
353 07:47:38	-9.95	27538
353 09:32:33	-36.30	27539
353 11:17:29	-62.66	27540
353 13:02:24	-89.01	27541
353 14:47:19	-115.37	27542
353 16:32:14	-141.72	27543
353 18:17:09	-168.08	27544
353 20:02:04	165.56	27545
353 21:46:59	139.21	27546
353 23:31:55	112.86	27547

353 00:42:55	-40.47	2299
353 02:27:49	-66.82	2300
353 04:12:43	-93.18	2301
353 05:57:37	-119.53	2302
353 07:42:31	-145.88	2303
353 09:27:25	-172.23	2304
353 11:12:19	161.42	2305
353 12:57:13	135.07	2306
353 14:42:07	108.72	2307
353 16:27:01	82.37	2308
353 18:11:55	56.02	2309
353 19:56:49	29.67	2310
353 21:41:43	3.32	2311
353 23:26:38	-23.03	2312

354 01:26:06	34.25	33808
354 03:10:58	7.91	33809
354 04:55:50	-18.44	33810
354 06:40:42	-44.78	33811
354 08:25:34	-71.12	33812
354 10:10:26	-97.46	33813
354 11:55:18	-123.81	33814
354 13:40:10	-150.15	33815
354 15:25:02	-176.49	33816
354 17:09:54	157.17	33817
354 18:54:46	130.82	33818
354 20:39:38	104.48	33819
354 22:24:30	78.14	33820

354 01:16:50	86.50	27548
354 03:01:45	60.15	27549
354 04:46:40	33.79	27550
354 06:31:35	7.43	27551
354 08:16:30	-18.92	27552
354 10:01:25	-45.28	27553
354 11:46:21	-71.63	27554
354 13:31:16	-97.99	27555
354 15:16:11	-124.34	27556
354 17:01:06	-150.70	27557
354 18:46:01	-177.05	27558
354 20:30:56	156.59	27559
354 22:15:51	130.24	27560

354 01:11:32	-49.38	2313
354 02:56:26	-75.73	2314
354 04:41:20	-102.08	2315
354 06:26:14	-128.43	2316
354 08:11:08	-154.78	2317
354 09:56:02	178.87	2318
354 11:40:56	152.52	2319
354 13:25:50	126.17	2320
354 15:10:44	99.81	2321
354 16:55:38	73.46	2322
354 18:40:32	47.11	2323
354 20:25:26	20.76	2324
354 22:10:20	-5.59	2325
354 23:55:14	-31.94	2326

355 00:09:22	51.80	33821
355 01:54:15	25.46	33822
355 03:39:07	- .88	33823
355 05:23:59	-27.23	33824
355 07:08:51	-53.57	33825
355 09:53:43	-79.91	33826
355 10:38:35	-106.25	33827
355 12:23:27	-132.60	33828
355 14:08:19	-158.94	33829
355 15:53:11	174.72	33830
355 17:38:03	148.38	33831
355 19:22:55	122.03	33832
355 21:07:47	95.69	33833
355 22:52:39	69.35	33834

355 00:00:47	103.88	27561
355 01:45:42	77.53	27562
355 03:30:37	51.17	27563
355 05:15:32	24.82	27564
355 07:00:27	-1.54	27565
355 08:45:22	-27.90	27566
355 10:30:17	-54.25	27567
355 12:15:12	-80.61	27568
355 14:00:08	-106.96	27569
355 15:45:03	-133.32	27570
355 17:29:58	-159.67	27571
355 19:14:53	173.97	27572
355 20:59:48	147.62	27573
355 22:44:43	121.26	27574

SATELLITE S2							SATELLITE S3							SATELLITE S4							
Ascending Node Predictions							Ascending Node Predictions							Ascending Node Predictions							
Predicting for 182 days							Predicting for 183 days							Predicting for 183 days							
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg
352 00:05:34	-105.42	25841	352 00:14:31	-71.34	16883	352 01:32:47	-174.64	6341													
352 01:47:36	-130.93	25842	352 01:55:46	-96.65	16884	352 03:14:53	159.84	6342													
352 03:29:32	-156.43	25843	352 03:37:00	-121.96	16885	352 04:57:00	134.30	6343													
352 05:11:39	178.07	25844	352 05:18:15	-147.27	16886	352 06:39:06	108.78	6344													
352 06:53:41	152.56	25845	352 06:59:29	-172.58	16887	352 08:21:12	83.26	6345													
352 08:35:43	127.06	25846	352 08:40:44	162.11	16888	352 10:03:19	57.73	6346													
352 10:17:45	101.55	25847	352 10:21:59	136.79	16889	352 11:45:25	32.21	6347													
352 11:59:47	76.04	25848	352 12:03:13	111.49	16890	352 13:27:31	6.68	6348													
352 13:41:49	50.53	25849	352 13:44:28	86.17	16891	352 15:09:37	-18.84	6349													
352 15:23:51	25.03	25850	352 15:25:42	60.87	16892	352 16:51:44	-44.37	6350													
352 17:05:52	-47	25851	352 17:06:57	35.55	16893	352 18:33:50	-69.89	6351													
352 18:47:54	-25.97	25852	352 18:48:12	10.23	16894	352 20:15:56	-95.41	6352													
352 20:29:56	-51.48	25853	352 20:29:26	-15.07	16895	352 21:58:03	-120.95	6353													
352 22:11:58	-76.99	25854	352 22:10:41	-40.39	16896	352 23:40:09	-146.47	6354													
352 23:54:00	-102.50	25855	352 23:51:55	-65.69	16897																
353 01:36:02	-128.00	25856	353 01:33:10	-91.01	16898	353 01:22:15	-171.99	6355													
353 03:18:03	-153.50	25857	353 03:14:25	-116.32	16899	353 03:04:22	162.47	6356													
353 05:00:05	-179.00	25858	353 04:55:39	-141.63	16900	353 04:46:28	136.95	6357													
353 06:42:07	155.49	25859	353 06:36:54	-166.94	16901	353 06:28:34	111.43	6358													
353 08:24:09	129.98	25860	353 08:18:08	167.75	16902	353 08:10:41	85.90	6359													
353 10:06:11	104.47	25861	353 09:59:23	142.44	16903	353 09:52:47	60.37	6360													
353 11:48:13	78.97	25862	353 11:40:37	117.14	16904	353 11:34:53	34.85	6361													
353 13:30:14	53.47	25863	353 13:21:52	91.82	16905	353 13:17:00	9.32	6362													
353 15:12:16	27.96	25864	353 15:03:07	66.50	16906	353 14:59:06	-16.20	6363													
353 16:54:18	2.46	25865	353 16:44:21	41.20	16907	353 16:41:12	-41.72	6364													
353 18:36:20	-23.05	25866	353 18:25:36	15.88	16908	353 18:23:19	-67.26	6365													
353 20:18:22	-48.56	25867	353 20:06:50	-9.42	16909	353 20:05:25	-92.78	6366													
353 22:00:24	-74.07	25868	353 21:48:05	-34.74	16910	353 21:47:31	-118.30	6367													
353 23:42:25	-99.56	25869	353 23:29:20	-60.05	16911	353 23:29:38	-143.84	6368													
354 01:24:27	-125.07	25870	354 01:10:34	-85.36	16912	354 01:11:44	-169.36	6369													
354 03:06:29	-150.57	25871	354 02:51:49	-110.67	16913	354 02:53:50	165.12	6370													
354 04:48:31	-176.08	25872	354 04:33:03	-135.98	16914	354 04:35:57	139.59	6371													
354 06:30:33	158.41	25873	354 06:14:18	-161.29	16915	354 06:18:03	114.07	6372													
354 08:12:35	132.90	25874	354 07:55:33	173.39	16916	354 08:00:09	88.54	6373													
354 09:54:37	107.40	25875	354 09:36:47	148.09	16917	354 09:42:16	63.01	6374													
354 11:36:38	81.90	25876	354 11:18:02	122.77	16918	354 11:24:22	37.49	6375													
354 13:18:40	56.39	25877	354 12:59:16	97.47	16919	354 13:06:28	11.97	6376													
354 15:00:42	30.89	25878	354 14:40:31	72.15	16920	354 14:48:35	-13.57	6377													
354 16:42:44	5.38	25879	354 16:21:46	46.83	16921	354 16:30:41	-39.09	6378													
354 18:24:46	-20.13	25880	354 18:03:00	21.53	16922	354 18:12:47	-64.61	6379													
354 20:06:48	-45.63	25881	354 19:44:15	-3.79	16923	354 19:54:54	-90.15	6380													
354 21:48:49	-71.13	25882	354 21:25:29	-29.09	16924	354 21:37:00	-115.67	6381													
354 23:30:51	-96.64	25883	354 23:06:44	-54.41	16925	354 23:19:06	-141.19	6382													
355 01:12:53	-122.14	25884	355 00:47:59	-79.72	16926	355 01:01:13	-166.72	6383													
355 02:54:55	-147.65	25885	355 02:29:13	-105.03	16927	355 02:43:19	167.76	6384													
355 04:36:57	-173.16	25886	355 04:10:28	-130.34	16928	355 04:25:25	142.23	6385													
355 06:18:59	161.33	25887	355 05:51:42	-155.65	16929	355 06:07:32	116.70	6386													
355 08:01:00	135.84	25888	355 07:32:57	179.04	16930	355 07:49:38	91.18	6387													
355 09:43:02	110.33	25889	355 09:14:12	153.72	16931	355 09:31:44	65.66	6388													
355 11:25:04	84.83	25890	355 10:55:26	128.42	16932	355 11:13:51	40.12	6389													
355 13:07:06	59.32	25891	355 12:36:41	103.10	16933	355 12:55:57	14.60	6390													
355 14:49:08	33.81	25892	355 14:17:55	77.80	16934	355 14:38:03	-10.92	6391													
355 16:31:10	8.30	25893	355 15:59:10	52.48	16935	355 16:20:09	-36.44	6392													
355 18:13:11	-17.19	25894	355 17:40:24	27.18	16936	355 18:02:16	-61.98	6393													
355 19:55:13	-42.70	25895	355 19:21:39	1.86	16937	355 19:44:22	-87.50	6394													
355 21:37:15	-68.21	25896	355 21:02:54	-23.46	16938	355 21:26:28	-113.02	6395													
355 23:19:17	-93.71	25897	355 22:44:08	-48.76	16939	355 23:08:35	-138.55	6396													

**SATELLITE C2**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

356 00:37:31	43.01	33835
356 02:22:23	16.66	33836
356 04:07:15	-9.68	33837
356 05:52:07	-36.02	33838
356 07:36:59	-62.36	33839
356 09:21:51	-88.71	33840
356 11:06:43	-115.05	33841
356 12:51:35	-141.39	33842
356 14:36:27	-167.73	33843
356 16:21:19	-165.92	33844
356 18:06:11	139.58	33845
356 19:51:03	113.24	33846
356 21:35:55	86.90	33847
356 23:20:47	60.55	33848

**SATELLITE C3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

356 00:29:38	94.91	27575
356 02:14:34	68.55	27576
356 03:59:29	42.20	27577
356 05:44:24	15.84	27578
356 07:29:19	-10.51	27579
356 09:14:14	-36.87	27580
356 10:59:09	-63.22	27581
356 12:44:04	-89.58	27582
356 14:29:00	-115.93	27583
356 16:13:55	-142.29	27584
356 17:58:50	-168.64	27585
356 19:43:45	165.00	27586
356 21:28:40	138.64	27587
356 23:13:35	112.29	27588

**SATELLITE C4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

356 00:23:50	-40.85	2340
356 02:08:44	-67.20	2341
356 03:53:38	-93.55	2342
356 05:38:32	-119.90	2343
356 07:23:26	-146.25	2344
356 09:08:20	-172.60	2345
356 10:53:14	161.05	2346
356 12:38:08	134.70	2347
356 14:23:02	108.35	2348
356 16:07:57	82.00	2349
356 17:52:51	55.65	2350
356 19:37:45	29.30	2351
356 21:22:39	2.95	2352
356 23:07:33	-23.40	2353

357 01:05:39	34.21	33849
357 02:50:31	7.87	33850
357 04:35:23	-18.47	33851
357 06:20:15	-44.82	33852
357 08:05:07	-71.16	33853
357 09:49:59	-97.50	33854
357 11:34:51	-123.84	33855
357 13:19:43	-150.19	33856
357 15:04:35	-176.53	33857
357 16:49:27	157.13	33858
357 18:34:19	130.79	33859
357 20:19:11	104.44	33860
357 22:04:03	78.10	33861
357 23:48:56	51.76	33862

357 00:58:30	85.93	27589
357 02:43:26	59.58	27590
357 04:28:21	33.22	27591
357 06:13:16	6.87	27592
357 07:58:11	-19.49	27593
357 09:43:06	-45.84	27594
357 11:28:01	-72.20	27595
357 13:12:56	-98.55	27596
357 14:57:51	-124.91	27597
357 16:42:47	-151.26	27598
357 18:27:42	-177.62	27599
357 20:12:37	156.03	27600
357 21:57:32	129.67	27601
357 23:42:27	103.31	27602

357 00:52:27	-49.75	2354
357 02:37:21	-76.11	2355
357 04:22:15	-102.46	2356
357 06:07:09	-128.81	2357
357 07:52:03	-155.16	2358
357 09:36:57	178.49	2359
357 11:21:51	152.14	2360
357 13:06:45	125.79	2361
357 14:51:39	99.44	2362
357 16:36:33	73.09	2363
357 18:21:27	46.74	2364
357 20:06:21	20.39	2365
357 21:51:15	-5.96	2366
357 23:36:09	-32.31	2367

358 01:33:48	25.42	33863
358 03:18:40	-9.92	33864
358 05:03:32	-27.27	33865
358 06:48:24	-53.61	33866
358 08:33:16	-79.95	33867
358 10:18:08	-106.29	33868
358 12:03:00	-132.64	33869
358 13:47:52	-158.98	33870
358 15:32:44	174.68	33871
358 17:17:36	148.34	33872
358 19:02:28	121.99	33873
358 20:47:20	95.65	33874
358 22:32:12	69.31	33875

358 01:27:22	76.96	27603
358 03:12:17	50.60	27604
358 04:57:13	24.25	27605
358 06:42:08	-2.10	27606
358 08:27:03	-28.46	27607
358 10:11:58	-54.82	27608
358 11:56:53	-81.17	27609
358 13:41:48	-107.53	27610
358 15:26:43	-133.88	27611
358 17:11:38	-160.24	27612
358 18:56:34	173.41	27613
358 20:41:29	147.05	27614
358 22:26:24	120.70	27615

358 01:21:03	-58.66	2368
358 03:05:57	-85.01	2369
358 04:50:51	-111.36	2370
358 06:35:45	-137.72	2371
358 08:20:39	-164.07	2372
358 10:05:33	169.58	2373
358 11:50:27	143.23	2374
358 13:35:21	116.88	2375
358 15:20:15	90.53	2376
358 17:05:09	64.18	2377
358 18:50:03	37.83	2378
358 20:34:57	11.48	2379
358 22:19:51	-14.87	2380

359 00:17:04	42.97	33876
359 02:01:56	16.62	33877
359 03:46:48	-9.72	33878
359 05:31:40	-36.06	33879
359 07:16:32	-62.40	33880
359 09:01:24	-88.75	33881
359 10:46:16	-115.09	33882
359 12:31:08	-141.43	33883
359 14:16:00	-167.77	33884
359 16:00:52	165.88	33885
359 17:45:44	139.54	33886
359 19:30:36	113.20	33887
359 21:15:28	86.86	33888
359 23:00:20	60.51	33889

359 00:11:19	94.34	27616
359 01:56:14	67.99	27617
359 03:41:09	41.63	27618
359 05:26:04	15.27	27619
359 07:11:00	-11.08	27620
359 08:55:55	-37.43	27621
359 10:40:50	-63.79	27622
359 12:25:45	-90.15	27623
359 14:10:40	-116.50	27624
359 15:55:35	-142.86	27625
359 17:40:30	-169.21	27626
359 19:25:26	164.44	27627
359 21:10:21	138.08	27628
359 22:55:16	111.72	27629

359 00:04:45	-41.22	2381
359 01:49:39	-67.57	2382
359 03:34:33	-93.92	2383
359 05:19:27	-120.27	2384
359 07:04:21	-146.62	2385
359 08:49:16	-172.97	2386
359 10:34:10	160.68	2387
359 12:19:04	134.33	2388
359 14:03:58	107.98	2389
359 15:48:52	81.62	2390
359 17:33:46	55.27	2391
359 19:18:40	28.92	2392
359 21:03:34	2.57	2393
359 22:48:28	-23.78	2394

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT
day hr mn sc	deg	dg		day hr mn sc	deg	dg		day hr mn sc	deg	dg	
356 01:01:19	-119.22	25898		356 00:25:23	-74.08	16940		356 00:50:41	-164.08	6397	
356 02:43:21	-144.73	25899		356 02:06:37	-99.38	16941		356 02:32:47	170.40	6398	
356 04:25:23	-170.24	25900		356 03:47:52	-124.70	16942		356 04:14:54	144.87	6399	
356 06:07:24	164.27	25901		356 05:29:07	-150.01	16943		356 05:57:00	119.35	6400	
356 07:49:26	138.76	25902		356 07:10:21	-175.32	16944		356 07:39:06	93.83	6401	
356 09:31:28	113.26	25903		356 08:51:36	159.37	16945		356 09:21:13	68.29	6402	
356 11:13:30	87.75	25904		356 10:32:50	134.06	16946		356 11:03:19	42.77	6403	
356 12:55:32	62.24	25905		356 12:14:05	108.75	16947		356 12:45:25	17.25	6404	
356 14:37:34	36.73	25906		356 13:55:20	83.43	16948		356 14:27:32	-8.29	6405	
356 16:19:35	11.24	25907		356 15:36:34	58.13	16949		356 16:09:38	-33.81	6406	
356 18:01:37	-14.27	25908		356 17:17:49	32.81	16950		356 17:51:44	-59.33	6407	
356 19:43:39	-39.78	25909		356 18:59:03	7.51	16951		356 19:33:51	-84.86	6408	
356 21:25:41	-65.28	25910		356 20:40:18	-17.81	16952		356 21:15:57	-110.38	6409	
356 23:07:43	-90.79	25911		356 22:21:33	-43.13	16953		356 22:58:03	-135.91	6410	
357 00:49:45	-116.30	25912		357 00:02:47	-68.43	16954		357 00:40:10	-161.44	6411	
357 02:31:46	-141.79	25913		357 01:44:02	-93.75	16955		357 02:22:16	173.04	6412	
357 04:13:48	-167.30	25914		357 03:25:16	-119.05	16956		357 04:04:22	147.52	6413	
357 05:55:50	167.19	25915		357 05:06:31	-144.37	16957		357 05:46:29	121.98	6414	
357 07:37:52	141.69	25916		357 06:47:46	-169.68	16958		357 07:28:35	96.46	6415	
357 09:19:54	116.18	25917		357 08:29:00	165.01	16959		357 09:10:41	70.94	6416	
357 11:01:56	90.67	25918		357 10:10:15	139.70	16960		357 10:52:48	45.40	6417	
357 12:43:57	65.18	25919		357 11:51:29	114.39	16961		357 12:34:54	19.88	6418	
357 14:25:59	39.67	25920		357 13:32:44	89.08	16962		357 14:17:00	-5.64	6419	
357 16:08:01	14.16	25921		357 15:13:58	63.77	16963		357 15:59:07	-31.17	6420	
357 17:50:03	-11.34	25922		357 16:55:13	38.46	16964		357 17:41:13	-56.69	6421	
357 19:32:05	-36.85	25923		357 18:36:28	13.14	16965		357 19:23:19	-82.22	6422	
357 21:14:07	-62.36	25924		357 20:17:42	-12.16	16966		357 21:05:26	-107.75	6423	
357 22:56:09	-87.87	25925		357 21:58:57	-37.48	16967		357 22:47:32	-133.27	6424	
358 00:38:10	-113.36	25926		358 01:21:26	-88.10	16969		358 00:29:38	-158.79	6425	
358 02:20:12	-138.87	25927		358 03:02:41	-113.42	16970		358 02:11:45	175.67	6426	
358 04:02:14	-164.38	25928		358 04:43:55	-138.72	16971		358 03:53:51	150.15	6427	
358 05:44:16	170.12	25929		358 06:25:10	-164.03	16972		358 05:35:57	124.63	6428	
358 07:26:18	144.61	25930		358 08:06:24	170.66	16973		358 07:18:04	99.09	6429	
358 09:08:20	119.10	25931		358 09:47:39	145.35	16974		358 09:00:10	73.57	6430	
358 10:50:21	93.61	25932		358 11:28:54	120.03	16975		358 10:42:16	48.05	6431	
358 12:32:23	68.10	25933		358 13:10:08	94.73	16976		358 12:24:22	22.53	6432	
358 14:14:25	42.59	25934		358 14:51:23	69.41	16977		358 14:06:29	-3.00	6433	
358 15:56:27	17.09	25935		358 16:32:37	44.11	16978		358 15:48:35	-28.53	6434	
358 17:38:29	-8.42	25936		358 18:13:52	18.79	16979		358 17:30:41	-54.05	6435	
358 19:20:31	-33.93	25937		358 19:55:07	-6.53	16980		358 19:12:48	-79.58	6436	
358 21:02:32	-59.42	25938		358 21:36:21	-31.83	16981		358 20:54:54	-105.10	6437	
358 22:44:34	-84.93	25939		358 23:17:36	-57.15	16982		358 22:37:00	-130.62	6438	
359 00:26:36	-110.44	25940		359 00:58:50	-82.45	16983		359 00:19:07	-156.16	6439	
359 02:08:38	-135.95	25941		359 02:40:05	-107.77	16984		359 02:01:13	178.32	6440	
359 03:50:40	-161.45	25942		359 04:21:19	-133.07	16985		359 03:43:19	152.80	6441	
359 05:32:42	173.04	25943		359 06:02:34	-158.39	16986		359 05:25:26	127.26	6442	
359 07:14:43	147.55	25944		359 07:43:49	176.30	16987		359 07:07:32	101.74	6443	
359 08:56:45	122.04	25945		359 09:25:03	150.99	16988		359 08:49:38	76.22	6444	
359 10:38:47	96.53	25946		359 11:06:18	125.68	16989		359 10:31:45	50.69	6445	
359 12:20:49	71.02	25947		359 12:47:32	100.37	16990		359 12:13:51	25.17	6446	
359 14:02:51	45.52	25948		359 14:28:47	75.06	16991		359 13:55:57	-3.36	6447	
359 15:44:53	20.01	25949		359 16:10:02	49.74	16992		359 15:38:04	-25.89	6448	
359 17:26:54	-5.49	25950		359 17:51:16	24.44	16993		359 17:20:10	-51.41	6449	
359 19:08:56	-30.99	25951		359 19:32:31	-88	16994		359 19:02:16	-76.93	6450	
359 20:50:58	-56.50	25952		359 21:13:45	-26.18	16995		359 20:44:23	-102.47	6451	
359 22:33:00	-82.01	25953		359 22:55:00	-51.50	16996		359 22:26:29	-127.99	6452	

**SATELLITE C2****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

360 00:45:12	34.17	33890
360 02:30:04	7.83	33891
360 04:14:56	-18.51	33892
360 05:59:48	-44.86	33893
360 07:44:40	-71.20	33894
360 09:29:32	-97.54	33895
360 11:14:25	-123.88	33896
360 12:59:17	-150.22	33897
360 14:44:09	-176.57	33898
360 16:29:01	157.09	33899
360 18:13:53	130.75	33900
360 19:58:45	104.41	33901
360 21:43:37	78.06	33902
360 23:28:29	51.72	33903

**SATELLITE C3****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

360 00:40:11	85.37	27630
360 02:25:06	59.01	27631
360 04:10:01	32.66	27632
360 05:54:56	6.30	27633
360 07:39:51	-20.05	27634
360 09:24:47	-46.41	27635
360 11:09:42	-72.76	27636
360 12:54:37	-99.12	27637
360 14:39:32	-125.47	27638
360 16:24:27	-151.83	27639
360 18:09:22	-178.19	27640
360 19:54:17	155.46	27641
360 21:39:13	129.11	27642
360 23:24:08	102.75	27643

**SATELLITE C4****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

360 00:33:22	-50.13	2395
360 02:18:16	-76.48	2396
360 04:03:10	-102.83	2397
360 05:48:04	-129.18	2398
360 07:32:58	-155.53	2399
360 09:17:52	178.12	2400
360 11:02:46	151.77	2401
360 12:47:40	125.42	2402
360 14:32:34	99.07	2403
360 16:17:28	72.72	2404
360 18:02:22	46.37	2405
360 19:47:16	20.01	2406
360 21:32:10	-6.34	2407
360 23:17:04	-32.69	2408

361 01:13:21	25.38	33904
361 02:58:13	-9.96	33905
361 04:43:05	-27.31	33906
361 06:27:57	-53.65	33907
361 08:12:49	-79.99	33908
361 09:57:41	-106.33	33909
361 11:42:33	-132.68	33910
361 13:27:25	-159.02	33911
361 15:12:17	174.64	33912
361 16:57:09	148.30	33913
361 18:42:01	121.95	33914
361 20:26:53	95.61	33915
361 22:11:45	69.27	33916
361 23:56:37	42.92	33917

361 01:09:03	76.39	27644
361 02:53:58	50.04	27645
361 04:38:53	23.68	27646
361 06:23:48	-2.67	27647
361 08:08:43	-29.03	27648
361 09:53:38	-55.38	27649
361 11:38:34	-81.74	27650
361 13:23:29	-108.09	27651
361 15:08:24	-134.45	27652
361 16:53:19	-160.80	27653
361 18:38:14	172.84	27654
361 20:23:09	146.49	27655
361 22:08:04	120.13	27656
361 23:52:59	93.77	27657

361 01:01:58	-59.04	2409
361 02:46:52	-85.39	2410
361 04:31:46	-111.74	2411
361 06:16:40	-138.09	2412
361 08:01:34	-164.44	2413
361 09:46:28	169.21	2414
361 11:31:22	142.86	2415
361 13:16:16	116.51	2416
361 15:01:10	90.16	2417
361 16:46:04	63.81	2418
361 18:30:58	37.46	2419
361 20:15:52	11.11	2420
361 22:00:46	-15.25	2421
361 23:45:40	-41.60	2422

362 01:41:29	16.58	33918
362 03:26:21	-9.76	33919
362 05:11:13	-36.10	33920
362 06:56:05	-62.45	33921
362 08:40:57	-88.79	33922
362 10:25:49	-115.13	33923
362 12:10:41	-141.47	33924
362 13:55:33	-167.82	33925
362 15:40:25	165.84	33926
362 17:25:17	139.50	33927
362 19:10:10	113.16	33928
362 20:55:02	86.82	33929
362 22:39:54	60.47	33930

362 01:37:55	67.42	27658
362 03:22:50	41.07	27659
362 05:07:45	14.71	27660
362 06:52:40	-11.63	27661
362 08:37:35	-38.00	27662
362 10:22:30	-64.36	27663
362 12:07:25	-90.71	27664
362 13:52:21	-117.06	27665
362 15:37:16	-143.42	27666
362 17:22:11	-169.78	27667
362 19:07:06	163.87	27668
362 20:52:01	137.51	27669
362 22:36:56	111.16	27670

362 01:30:34	-67.95	2423
362 03:15:28	-94.30	2424
362 05:00:22	-120.65	2425
362 06:45:17	-147.00	2426
362 08:30:11	-173.35	2427
362 10:15:05	160.30	2428
362 11:59:59	133.95	2429
362 13:44:53	107.60	2430
362 15:29:47	81.25	2431
362 17:14:41	54.90	2432
362 18:59:35	28.55	2433
362 20:44:29	2.20	2434
362 22:29:23	-24.15	2435

363 00:24:46	34.13	33931
363 02:09:38	7.79	33932
363 03:54:30	-18.55	33933
363 05:39:22	-44.90	33934
363 07:24:14	-71.24	33935
363 09:09:06	-97.58	33936
363 10:53:58	-123.92	33937
363 12:38:50	-150.27	33938
363 14:23:42	-176.61	33939
363 16:08:34	157.05	33940
363 17:53:26	130.71	33941
363 19:38:18	104.36	33942
363 21:23:10	78.02	33943
363 23:08:02	51.68	33944

363 00:21:51	84.80	27671
363 02:06:46	58.45	27672
363 03:51:42	32.09	27673
363 05:36:37	5.74	27674
363 07:21:32	-20.62	27675
363 09:06:27	-46.97	27676
363 10:51:22	-73.33	27677
363 12:36:17	-99.68	27678
363 14:21:12	-126.04	27679
363 16:06:07	-152.40	27680
363 17:51:03	-178.75	27681
363 19:35:59	154.90	27682
363 21:20:53	128.54	27683
363 23:05:48	102.18	27684

363 00:14:17	-50.50	2436
363 01:59:11	-76.85	2437
363 03:44:05	-103.20	2438
363 05:28:59	-129.55	2439
363 07:13:53	-155.90	2440
363 08:58:47	177.74	2441
363 10:43:41	151.39	2442
363 12:28:35	125.04	2443
363 14:13:29	98.69	2444
363 15:58:23	72.34	2445
363 17:43:17	45.99	2446
363 19:28:11	19.64	2447
363 21:13:05	-6.71	2448
363 22:57:59	-33.06	2449

SATELLITE S2							
Ascending Node Predictions							
Predicting for 182 days							
TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc
	deg	dg					
360 00:15:02	-107.51	25954					
360 01:57:04	-133.02	25955					
360 03:39:06	-158.53	25956					
360 05:21:07	175.98	25957					
360 07:03:09	150.47	25958					
360 08:45:11	124.96	25959					
360 10:27:13	99.45	25960					
360 12:09:15	73.95	25961					
360 13:51:17	48.44	25962					
360 15:33:18	22.95	25963					
360 17:15:20	-2.56	25964					
360 18:57:22	-28.07	25965					
360 20:39:24	-53.58	25966					
360 22:21:26	-79.08	25967					

SATELLITE S3							
Ascending Node Predictions							
Predicting for 183 days							
TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc
	deg	dg					
360 00:36:15	-76.82	16997					
360 02:17:29	-102.12	16998					
360 03:58:44	-127.44	16999					
360 05:39:58	-152.74	17000					
360 07:21:13	-178.06	17001					
360 09:02:28	156.63	17002					
360 10:43:42	131.32	17003					
360 12:24:57	106.01	17004					
360 14:06:11	80.70	17005					
360 15:47:26	55.39	17006					
360 17:28:40	30.08	17007					
360 19:09:55	4.77	17008					
360 20:51:10	-20.55	17009					
360 22:32:24	-45.85	17010					

SATELLITE S4							
Ascending Node Predictions							
Predicting for 183 days							
TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc
	deg	dg					
360 00:08:35	-153.51	6453					
360 01:50:42	-179.05	6454					
360 03:32:48	155.43	6455					
360 05:14:54	129.91	6456					
360 06:57:01	104.38	6457					
360 08:39:07	78.86	6458					
360 10:21:13	53.33	6459					
360 12:03:20	27.80	6460					
360 13:45:26	2.28	6461					
360 15:27:32	-23.24	6462					
360 17:09:39	-48.78	6463					
360 18:51:45	-74.30	6464					
360 20:33:51	-99.82	6465					
360 22:15:57	-125.34	6466					
360 23:58:04	-150.88	6467					

361 00:03:28	-104.59	25968
361 01:45:29	-130.09	25969
361 03:27:31	-155.59	25970
361 05:09:33	178.90	25971
361 06:51:35	153.39	25972
361 08:33:37	127.88	25973
361 10:15:39	102.38	25974
361 11:57:40	76.88	25975
361 13:39:42	51.38	25976
361 15:21:44	25.87	25977
361 17:03:46	.36	25978
361 18:45:48	-25.15	25979
361 20:27:50	-50.65	25980
361 22:09:51	-76.15	25981
361 23:51:53	-101.66	25982

361 00:13:39	-71.17	17011
361 01:54:53	-96.47	17012
361 03:36:08	-121.79	17013
361 05:17:23	-147.11	17014
361 06:58:37	-172.41	17015
361 08:39:52	162.27	17016
361 10:21:06	136.97	17017
361 12:02:21	111.65	17018
361 13:43:36	86.34	17019
361 15:24:50	61.03	17020
361 17:06:05	35.72	17021
361 18:47:19	10.41	17022
361 20:28:34	-14.90	17023
361 22:09:49	-40.22	17024
361 23:51:03	-65.52	17025

361 01:40:10	-176.40	6468
361 03:22:16	158.08	6469
361 05:04:23	132.55	6470
361 06:46:29	107.02	6471
361 08:28:35	81.50	6472
361 10:10:42	55.97	6473
361 11:52:48	30.45	6474
361 13:34:54	4.93	6475
361 15:17:01	-20.61	6476
361 16:59:07	-46.13	6477
361 18:41:13	-71.65	6478
361 20:23:20	-97.19	6479
361 22:05:26	-122.71	6480
361 23:47:32	-148.23	6481

362 01:33:55	-127.16	25983
362 03:15:57	-152.67	25984
362 04:57:59	-178.18	25985
362 06:40:01	156.31	25986
362 08:22:03	130.81	25987
362 10:04:04	105.31	25988
362 11:46:06	79.81	25989
362 13:28:08	54.30	25990
362 15:10:10	28.79	25991
362 16:52:12	3.28	25992
362 18:34:14	-22.22	25993
362 20:16:15	-47.72	25994
362 21:58:17	-73.23	25995
362 23:40:19	-98.73	25996

362 01:32:18	-90.84	17026
362 03:13:32	-116.14	17027
362 04:54:47	-141.46	17028
362 06:36:01	-166.76	17029
362 08:17:16	167.92	17030
362 09:58:31	142.60	17031
362 11:39:45	117.30	17032
362 13:21:00	91.98	17033
362 15:02:14	66.68	17034
362 16:43:29	41.36	17035
362 18:24:44	16.05	17036
362 20:05:58	-9.26	17037
362 21:47:13	-34.57	17038
362 23:28:27	-59.88	17039

362 01:29:39	-173.76	6482
362 03:11:45	160.71	6483
362 04:53:51	135.19	6484
362 06:35:58	109.66	6485
362 08:18:04	84.14	6486
362 10:00:10	58.62	6487
362 11:42:17	33.08	6488
362 13:24:23	7.56	6489
362 15:06:29	-17.96	6490
362 16:48:36	-43.50	6491
362 18:30:42	-69.02	6492
362 20:12:48	-94.54	6493
362 21:54:55	-120.07	6494
362 23:37:01	-145.60	6495

363 01:22:21	-124.24	25997
363 03:04:23	-149.75	25998
363 04:46:25	-175.26	25999
363 06:28:26	159.25	26000
363 08:10:28	133.74	26001
363 09:52:30	108.24	26002
363 11:34:32	82.73	26003
363 13:16:34	57.22	26004
363 14:58:36	31.71	26005
363 16:40:37	6.22	26006
363 18:22:39	-19.29	26007
363 20:04:41	-44.80	26008
363 21:46:43	-70.30	26009
363 23:28:45	-95.81	26010

363 01:09:42	-85.19	17040
363 02:50:57	-110.51	17041
363 04:32:11	-135.81	17042
363 06:13:26	-161.13	17043
363 07:54:40	173.57	17044
363 09:35:55	148.25	17045
363 11:17:10	122.93	17046
363 12:58:24	97.63	17047
363 14:39:39	72.31	17048
363 16:20:53	47.01	17049
363 18:02:08	21.69	17050
363 19:43:22	-3.61	17051
363 21:24:37	-28.93	17052
363 23:05:52	-54.24	17053

West longitude is negative (-)

SATELLITE C2						SATELLITE C3						SATELLITE C4					
Ascending Node Predictions						Ascending Node Predictions						Ascending Node Predictions					
Predicting for 183 days						Predicting for 183 days						Predicting for 183 days					
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg
364 00:52:54	25.34	33945		364 00:50:43	75.83	27685		364 00:42:53	-59.41	2450							
364 02:37:46	-1.01	33946		364 02:35:38	49.47	27686		364 02:27:47	-85.76	2451							
364 04:22:38	-27.35	33947		364 04:20:33	23.12	27687		364 04:12:41	-112.11	2452							
364 06:07:30	-53.69	33948		364 06:05:29	-3.24	27688		364 05:57:35	-138.46	2453							
364 07:52:22	-80.03	33949		364 07:50:24	-29.59	27689		364 07:42:29	-164.81	2454							
364 09:37:14	-106.38	33950		364 09:35:19	-55.95	27690		364 09:27:23	168.84	2455							
364 11:22:06	-132.72	33951		364 11:20:14	-82.30	27691		364 11:12:17	142.49	2456							
364 13:06:58	-159.06	33952		364 13:05:09	-108.66	27692		364 12:57:11	116.13	2457							
364 14:51:50	174.60	33953		364 14:50:04	-135.01	27693		364 14:42:05	89.78	2458							
364 16:36:42	148.25	33954		364 16:34:59	-161.37	27694		364 16:26:59	63.43	2459							
364 18:21:34	121.91	33955		364 18:19:54	172.28	27695		364 18:11:53	37.08	2460							
364 20:06:26	95.57	33956		364 20:04:50	145.92	27696		364 19:56:47	10.73	2461							
364 21:51:19	69.23	33957		364 21:49:45	119.57	27697		364 21:41:41	-15.62	2462							
364 23:36:11	42.89	33958		364 23:34:40	93.21	27698		364 23:26:35	-41.97	2463							
365 01:21:03	16.54	33959		365 01:19:35	66.86	27699		365 01:11:29	-68.32	2464							
365 03:05:55	-9.80	33960		365 03:04:30	40.50	27700		365 02:56:23	-94.67	2465							
365 04:50:47	-36.14	33961		365 04:49:25	14.14	27701		365 04:41:17	-121.02	2466							
365 06:35:39	-62.48	33962		365 06:34:20	-12.21	27702		365 06:26:11	-147.37	2467							
365 08:20:31	-88.83	33963		365 08:19:15	-38.57	27703		365 08:11:05	-173.72	2468							
365 10:05:23	-115.17	33964		365 10:04:11	-64.92	27704		365 09:56:00	159.93	2469							
365 11:50:15	-141.51	33965		365 11:49:06	-91.27	27705		365 11:40:54	133.58	2470							
365 13:35:07	-167.85	33966		365 13:34:01	-117.63	27706		365 13:25:42	107.23	2471							
365 15:19:59	165.80	33967		365 15:18:56	-143.99	27707		365 15:10:42	80.88	2472							
365 17:04:51	139.46	33968		365 17:03:51	-170.34	27708		365 16:55:36	.54.53	2473							
365 18:49:43	113.12	33969		365 18:48:46	163.30	27709		365 18:40:30	28.18	2474							
365 20:34:35	86.78	33970		365 20:33:41	136.95	27710		365 20:25:24	1.83	2475							
365 22:19:27	60.43	33971		365 22:18:36	110.59	27711		365 22:10:18	-24.52	2476							
365 23:55:12								365 23:55:12	-50.87	2477							
001 00:04:19	34.09	33972		001 00:03:32	84.24	27712		001 01:40:06	-77.23	2478							
001 01:49:11	7.75	33973		001 01:48:27	57.88	27713		001 03:25:00	-103.58	2479							
001 03:34:03	-18.60	33974		001 03:33:22	31.53	27714		001 05:09:54	-129.93	2480							
001 05:18:55	-44.94	33975		001 05:18:17	5.17	27715		001 06:54:48	-156.28	2481							
001 07:03:47	-71.28	33976		001 07:03:12	-21.18	27716		001 08:39:42	177.37	2482							
001 08:48:39	-97.62	33977		001 08:48:07	-47.54	27717		001 10:24:36	151.02	2483							
001 10:33:31	-123.97	33978		001 10:33:02	-73.89	27718		001 12:09:30	124.67	2484							
001 12:18:23	-150.31	33979		001 12:17:58	-100.25	27719		001 13:54:24	98.32	2485							
001 14:03:15	-176.65	33980		001 14:02:53	-126.60	27720		001 15:39:18	71.97	2486							
001 15:48:07	157.01	33981		001 15:47:48	-152.96	27721		001 17:24:12	45.62	2487							
001 17:32:59	130.66	33982		001 17:32:43	-179.31	27722		001 19:09:06	19.27	2488							
001 19:17:51	104.32	33983		001 19:17:38	154.33	27723		001 20:54:00	-7.08	2489							
001 21:02:44	77.98	33984		001 21:02:33	127.97	27724		001 22:38:54	-33.43	2490							
001 22:47:36	51.64	33985		001 22:47:28	101.62	27725											
002 00:32:28	25.30	33986		002 00:32:23	75.26	27726		002 00:23:48	-59.78	2491							
002 02:17:20	-1.05	33987		002 02:17:19	48.91	27727		002 02:08:42	-86.13	2492							
002 04:02:12	-27.39	33988		002 04:02:14	22.55	27728		002 03:53:36	-112.48	2493							
002 05:47:04	-53.73	33989		002 05:47:09	-3.80	27729		002 05:38:30	-138.84	2494							
002 07:31:56	-80.07	33990		002 07:32:04	-30.16	27730		002 07:23:24	-165.19	2495							
002 09:16:48	-106.42	33991		002 09:16:59	-56.51	27731		002 09:08:18	168.46	2496							
002 11:01:40	-132.76	33992		002 11:01:54	-82.87	27732		002 10:53:12	142.11	2497							
002 12:46:32	-159.10	33993		002 12:46:49	-109.22	27733		002 12:38:06	115.76	2498							
002 14:31:24	174.56	33994		002 14:31:44	-135.58	27734		002 14:23:00	89.41	2499							
002 16:16:16	148.21	33995		002 16:16:40	-161.93	27735		002 16:07:54	63.06	2500							
002 18:01:08	121.87	33996		002 18:01:35	171.71	27736		002 17:52:48	36.71	2501							
002 19:46:00	95.53	33997		002 19:46:30	145.36	27737		002 19:37:42	10.36	2502							
002 21:30:52	69.19	33998		002 21:31:25	119.00	27738		002 21:22:36	-15.99	2503							
002 23:15:44	42.84	33999		002 23:16:20	92.65	27739		002 23:07:30	-42.34	2504							

SATELLITE S2						SATELLITE S3						SATELLITE S4					
Ascending Node Predictions						Ascending Node Predictions						Ascending Node Predictions					
Predicting for 182 days						Predicting for 183 days						Predicting for 183 days					
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg
364 01:10:47	-121.	32	26011	364 00:47:06	-79.	55	17054	364 01:08:36	-168.	48	6510						
364 02:52:48	-146.	81	26012	364 02:28:21	-104.	86	17055	364 02:50:42	166.	00	6511						
364 04:34:50	-172.	32	26013	364 04:09:35	-130.	17	17056	364 04:32:48	140.	47	6512						
364 06:16:52	162.	17	26014	364 05:50:50	-155.	48	17057	364 06:14:55	114.	94	6513						
364 07:58:54	136.	67	26015	364 07:32:05	179.	20	17058	364 07:57:01	89.	42	6514						
364 09:40:56	111.	16	26016	364 09:13:19	153.	90	17059	364 09:39:07	63.	90	6515						
364 11:22:58	85.	65	26017	364 10:54:34	128.	58	17060	364 11:21:14	38.	36	6516						
364 13:04:59	60.	16	26018	364 12:35:48	103.	28	17061	364 13:03:20	12.	84	6517						
364 14:47:01	34.	65	26019	364 14:17:03	77.	96	17062	364 14:45:26	-12.	68	6518						
364 16:29:03	9.	14	26020	364 15:58:18	52.	64	17063	364 16:27:33	-38.	22	6519						
364 18:11:05	-16.	37	26021	364 17:39:32	27.	34	17064	364 18:09:39	-63.	74	6520						
364 19:53:07	-41.	87	26022	364 19:20:47	2.	02	17065	364 19:51:45	-89.	26	6521						
364 21:35:09	-67.	38	26023	364 21:02:01	-23.	28	17066	364 21:33:52	-114.	79	6522						
364 23:17:10	-92.	87	26024	364 22:43:16	-48.	60	17067	364 23:15:58	-140.	31	6523						
365 00:59:12	-118.	38	26025	365 00:24:30	-73.	90	17068	365 00:58:04	-165.	84	6524						
365 02:41:14	-143.	89	26026	365 02:05:45	-99.	22	17069	365 02:40:10	168.	64	6525						
365 04:23:16	-169.	40	26027	365 03:47:00	-124.	53	17070	365 04:22:17	143.	11	6526						
365 06:05:18	165.	10	26028	365 05:28:14	-149.	84	17071	365 06:04:23	117.	59	6527						
365 07:47:20	139.	59	26029	365 07:09:29	-175.	15	17072	365 07:46:29	92.	07	6528						
365 09:29:21	114.	09	26030	365 08:50:43	159.	54	17073	365 09:28:36	66.	53	6529						
365 11:11:23	88.	59	26031	365 10:31:58	134.	23	17074	365 11:10:42	41.	01	6530						
365 12:53:25	63.	08	26032	365 12:13:13	108.	91	17075	365 12:52:48	15.	49	6531						
365 14:35:27	37.	57	26033	365 13:54:27	83.	61	17076	365 14:34:55	-10.	05	6532						
365 16:17:29	12.	06	26034	365 15:35:42	58.	29	17077	365 16:17:01	-35.	57	6533						
365 17:59:31	-13.	44	26035	365 17:16:56	32.	99	17078	365 17:59:07	-61.	09	6534						
365 19:41:33	-38.	95	26036	365 18:58:11	7.	67	17079	365 19:41:14	-86.	62	6535						
365 21:23:34	-64.	44	26037	365 20:39:26	-17.	65	17080	365 21:23:20	-112.	15	6536						
365 23:05:36	-89.	95	26038	365 22:20:40	-42.	95	17081	365 23:05:26	-137.	67	6537						
001 00:47:38	-115.	46	26039	001 00:01:55	-68.	27	17082	001 00:47:33	-163.	20	6538						
001 02:29:40	-140.	97	26040	001 01:43:09	-93.	57	17083	001 02:29:39	171.	28	6539						
001 04:11:42	-166.	47	26041	001 03:24:24	-118.	89	17084	001 04:11:45	145.	76	6540						
001 05:53:44	168.	02	26042	001 05:05:39	-144.	20	17085	001 05:53:52	120.	22	6541						
001 07:35:45	142.	52	26043	001 06:46:53	-169.	51	17086	001 07:35:58	94.	70	6542						
001 09:17:47	117.	02	26044	001 08:28:08	165.	18	17087	001 09:18:04	69.	18	6543						
001 10:59:49	91.	51	26045	001 10:09:22	139.	87	17088	001 11:00:11	43.	64	6544						
001 12:41:51	66.	00	26046	001 11:50:37	114.	56	17089	001 12:42:17	18.	12	6545						
001 14:23:53	40.	49	26047	001 13:31:51	89.	25	17090	001 14:24:23	-7.	40	6546						
001 16:05:55	14.	99	26048	001 15:13:06	63.	94	17091	001 16:06:30	-32.	93	6547						
001 17:47:56	-10.	51	26049	001 16:54:21	38.	62	17092	001 17:48:36	-58.	46	6548						
001 19:29:58	-36.	01	26050	001 18:35:35	13.	32	17093	001 19:30:42	-83.	98	6549						
001 21:12:00	-61.	52	26051	001 20:16:50	-12.	00	17094	001 21:12:49	-109.	51	6550						
001 22:54:02	-87.	03	26052	001 21:58:04	-37.	30	17095	001 22:54:55	-135.	03	6551						
001 23:39:19				001 23:39:19	-62.	62	17096										
002 00:36:04	-112.	54	26053	002 01:20:34	-87.	94	17097	002 00:37:01	-160.	55	6552						
002 02:18:06	-138.	04	26054	002 03:01:48	-113.	24	17098	002 02:19:07	173.	92	6553						
002 04:00:07	-163.	54	26055	002 04:43:03	-138.	56	17099	002 04:01:14	148.	39	6554						
002 05:42:09	170.	95	26056	002 06:24:17	-163.	86	17100	002 05:43:20	122.	87	6555						
002 07:24:11	145.	45	26057	002 08:05:32	170.	82	17101	002 07:25:26	97.	35	6556						
002 09:06:13	119.	94	26058	002 09:46:47	145.	51	17102	002 09:07:33	71.	81	6557						
002 10:48:15	94.	43	26059	002 11:28:01	120.	20	17103	002 10:49:39	46.	29	6558						
002 12:30:17	68.	92	26060	002 13:09:16	94.	89	17104	002 12:31:45	20.	77	6559						
002 14:12:18	43.	43	26061	002 14:50:30	69.	58	17105	002 14:13:52	-4.	77	6560						
002 15:54:20	17.	92	26062	002 16:31:45	44.	27	17106	002 15:55:58	-30.	29	6561						
002 17:36:22	-7.	58	26063	002 18:12:59	18.	96	17107	002 17:38:04	-55.	81	6562						
002 19:18:24	-33.	09	26064	002 19:54:14	-6.	35	17108	002 19:20:11	-81.	34	6563						
002 21:00:26	-58.	60	26065	002 21:35:29	-31.	67	17109	002 21:02:17	-106.	86	6564						
002 22:42:28	-84.	11	26066	002 23:16:43	-56.	97	17110	002 22:44:23	-132.	39	6565						

SATELLITE C2							SATELLITE C3							SATELLITE C4								
Ascending Node Predictions							Ascending Node Predictions							Ascending Node Predictions								
Predicting for 183 days							Predicting for 183 days							Predicting for 183 days								
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg	
003 01:00:36	16.50	34000		003 01:01:15	66.29	27740		003 00:52:24	-68.69	2505		003 02:45:28	-9.84	34001		003 02:37:18	-95.04	2506				
003 02:45:28	-9.84	34001		003 02:46:10	39.94	27741		003 04:22:12	-121.39	2507		003 04:30:20	-36.18	34002		003 06:07:06	-147.74	2508				
003 04:30:20	-36.18	34002		003 04:31:05	13.58	27742		003 07:52:00	-174.09	2509		003 06:15:12	-62.53	34003		003 09:36:54	159.55	2510				
003 06:15:12	-62.53	34003		003 06:16:01	-12.77	27743		003 11:21:48	133.20	2511		003 08:00:04	-88.87	34004		003 13:06:42	106.85	2512				
003 08:00:04	-88.87	34004		003 08:00:56	-39.13	27744		003 14:51:36	80.50	2513		003 09:44:56	-115.21	34005		003 16:36:30	54.15	2514				
003 09:44:56	-115.21	34005		003 09:45:51	-65.48	27745		003 18:21:24	27.80	2515		003 11:29:48	-141.55	34006		003 20:06:18	1.45	2516				
003 11:29:48	-141.55	34006		003 11:30:46	-91.84	27746		003 21:59:01	-24.90	2517		003 13:14:40	-167.90	34007		003 21:59:13	-24.90	2517				
003 13:14:40	-167.90	34007		003 13:15:41	-118.20	27747		003 23:36:07	-51.25	2518		003 14:59:32	165.76	34008		003 23:43:53	34.05	34013				
003 14:59:32	165.76	34008		003 15:00:36	-144.55	27748		003 23:45:12	83.67	27753		003 16:44:25	139.42	34009		003 18:29:17	113.08	34010				
003 16:44:25	139.42	34009		003 16:45:31	-170.91	27749		003 20:14:09	136.39	27751		003 20:14:09	86.73	34011		003 22:00:17	110.03	27752				
003 20:14:09	86.73	34011		003 20:15:22	162.74	27750		003 22:00:17	110.03	27752		003 21:59:01	60.39	34012		003 23:36:07	-51.25	2518				
003 21:59:01	60.39	34012		003 22:00:17	110.03	27752		003 23:36:07	-51.25	2518		003 23:43:53	34.05	34013								
004 01:28:45	7.71	34014		004 01:30:07	57.32	27754		004 01:21:01	-77.60	2519		004 03:13:37	-18.64	34015		004 03:05:55	-103.95	2520				
004 03:13:37	-18.64	34015		004 03:15:02	30.96	27755		004 04:50:49	-130.30	2521		004 04:58:29	-44.98	34016		004 06:35:43	-156.65	2522				
004 04:58:29	-44.98	34016		004 04:59:57	4.61	27756		004 08:20:37	177.00	2523		004 06:43:21	-71.32	34017		004 10:05:31	150.65	2524				
004 06:43:21	-71.32	34017		004 06:44:52	-21.75	27757		004 11:50:25	124.30	2525		004 08:28:13	-97.66	34018		004 11:59:39	-100.81	27760				
004 08:28:13	-97.66	34018		004 08:29:47	-48.10	27758		004 13:35:19	97.95	2526		004 10:13:05	-124.01	34019		004 13:44:33	-127.17	27761				
004 10:13:05	-124.01	34019		004 10:14:43	-74.46	27759		004 15:20:13	71.60	2527		004 11:57:57	-150.35	34020		004 15:29:28	-153.52	27762				
004 11:57:57	-150.35	34020		004 11:59:39	-100.81	27760		004 17:05:07	45.25	2528		004 13:42:49	-176.69	34021		004 17:14:23	-179.88	27763				
004 13:42:49	-176.69	34021		004 13:44:33	-127.17	27761		004 18:50:01	18.90	2529		004 15:27:41	156.97	34022		004 18:59:18	153.77	27764				
004 15:27:41	156.97	34022		004 15:29:28	-153.52	27762		004 20:34:55	-7.45	2530		004 17:12:33	130.62	34023		004 20:44:13	127.41	27765				
004 17:12:33	130.62	34023		004 17:14:23	-179.88	27763		004 22:19:49	-33.80	2531		004 18:57:25	104.28	34024		004 22:29:08	101.05	27766				
004 18:57:25	104.28	34024		004 18:59:18	153.77	27764		004 22:48:25	-42.71	2531		004 20:42:17	77.94	34025		004 20:44:13	127.41	27765				
004 20:42:17	77.94	34025		004 20:44:13	127.41	27765		005 00:04:43	-60.16	2532		004 22:27:09	51.60	34026		004 22:29:08	101.05	27766				
004 22:27:09	51.60	34026		004 22:29:08	101.05	27766		005 01:49:37	-86.51	2533		005 00:12:01	25.25	34027		005 03:34:31	-112.86	2534				
005 00:12:01	25.25	34027		005 01:58:59	48.35	27768		005 05:19:25	-139.21	2535		005 01:56:53	-1.09	34028		005 07:04:19	-165.56	2536				
005 01:56:53	-1.09	34028		005 03:43:54	21.99	27769		005 08:49:13	168.09	2537		005 03:41:45	-27.43	34029		005 10:34:07	141.74	2538				
005 03:41:45	-27.43	34029		005 05:28:49	-4.37	27770		005 12:19:01	115.39	2539		005 05:26:37	-53.77	34030		005 12:28:29	-109.79	27774				
005 05:26:37	-53.77	34030		005 07:13:44	-30.72	27771		005 14:03:55	89.04	2540		005 07:11:29	-80.12	34031		005 14:13:25	-136.14	27775				
005 07:11:29	-80.12	34031		005 08:58:39	-57.08	27772		005 15:48:49	62.69	2541		005 08:56:21	-106.46	34032		005 15:58:20	-162.50	27776				
005 08:56:21	-106.46	34032		005 10:43:34	-83.43	27773		005 17:33:43	36.34	2542		005 10:41:13	-132.80	34033		005 19:28:10	144.79	27778				
005 10:41:13	-132.80	34033		005 12:28:29	-109.79	27774		005 19:18:37	9.99	2543		005 12:26:06	-159.14	34034		005 21:13:05	118.44	27779				
005 12:26:06	-159.14	34034		005 14:13:25	-136.14	27775		005 21:03:31	-16.36	2544		005 14:10:58	174.52	34035		005 22:48:25	-42.71	2545				
005 14:10:58	174.52	34035		005 15:58:20	-162.50	27776		005 22:17:25	53.78	2555		005 15:55:50	148.17	34036		005 17:43:15	171.15	27777				
005 15:55:50	148.17	34036		005 17:43:15	171.15	27777		005 23:17:01	-51.62	2559		005 17:40:42	121.83	34037		005 19:57:02	135.82	27792				
005 17:40:42	121.83	34037		005 19:28:10	144.79	27778		006 00:33:19	-69.06	2546		005 19:25:34	95.49	34038		005 21:32:07	-25.27	2558				
005 19:25:34	95.49	34038		005 21:13:05	118.44	27779		006 02:18:13	-95.41	2547		005 21:10:26	69.14	34039		005 23:26:52	83.11	27794				
005 21:10:26	69.14	34039		005 22:58:00	92.08	27780		006 04:03:07	-121.76	2548		005 22:55:18	42.80	34040		006 09:17:49	159.18	2551				
005 22:55:18	42.80	34040		006 09:27:31	-66.05	27786		006 11:02:43	132.83	2552		006 09:24:30	-115.25	34046		006 11:12:26	-92.40	27787				
005 22:55:18	-115.25	34046		006 09:27:31	-66.05	27786		006 12:47:37	106.48	2553		006 09:24:30	-9.88	34042		006 12:57:21	-118.76	27788				
005 22:55:18	-9.88	34042		006 09:42:46	13.02	27783		006 14:32:31	80.13	2554		006 09:24:30	-36.23	34043		006 14:42:16	-145.12	27789				
005 22:55:18	-36.23	34043		006 09:42:46	13.02	27783		006 14:32:31	80.13	2554		006 09:24:30	-62.57	34044		006 14:42:16	-145.12	27789				
005 22:55:18	-62.57	34044		006 09:42:46	13.02	27783		006 14:32:31	80.13	2554		006 09:24:30	-88.91	34045		006 14:42:16	-145.12	27789				
005 22:55:18	-88.91	34045		006 09:42:46	13.02	27783		006 14:32:31	80.13	2554		006 09:24:30	-115.25	34046		006 14:42:16	-145.12	27789				
005 22:55:18	-115.25	34046		006 09:42:46	13.02	27783		006 14:32:31	80.13	2554		006 09:24:30	-141.60	34047		006 14:42:16	-145.12	27789				
005 22:55:18	-141.60	34047		006 09:42:46	13.02	27783		006 14:32:31	80.13	2554		006 09:24:30	-167.94	34048		006 14:42:16	-145.12	27789				
005 22:55:18	-167.94	34048		006 09:42:46	13.02	27783		006 14:														

**SATELLITE S2**

**Ascending Node Predictions**  
**Predicting for 182 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

003 00:24:29	-109.60	26067
003 02:06:31	-135.11	26068
003 03:48:33	-160.62	26069
003 05:30:35	173.88	26070
003 07:12:37	148.37	26071
003 08:54:39	122.86	26072
003 10:36:40	97.37	26073
003 12:18:42	71.86	26074
003 14:00:44	46.35	26075
003 15:42:46	20.85	26076
003 17:24:48	-4.66	26077
003 19:06:50	-30.17	26078
003 20:48:51	-55.66	26079
003 22:30:53	-81.17	26080

**SATELLITE S3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

003 00:57:58	-82.29	17111
003 02:39:12	-107.59	17112
003 04:20:27	-132.91	17113
003 06:01:42	-158.23	17114
003 07:42:56	176.47	17115
003 09:24:11	151.15	17116
003 11:05:25	125.85	17117
003 12:46:40	100.53	17118
003 14:27:55	75.22	17119
003 16:09:09	49.91	17120
003 17:50:24	24.60	17121
003 19:31:38	-71	17122
003 21:12:53	-26.02	17123
003 22:54:07	-51.33	17124

**SATELLITE S4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

003 00:26:30	-157.92	6566
003 02:08:36	176.56	6567
003 03:50:42	151.04	6568
003 05:32:49	125.50	6569
003 07:14:55	99.98	6570
003 08:57:01	74.46	6571
003 10:39:08	48.93	6572
003 12:21:14	23.40	6573
003 14:03:20	-2.12	6574
003 15:45:27	-27.65	6575
003 17:27:33	-53.17	6576
003 19:09:39	-78.70	6577
003 20:51:46	-104.23	6578
003 22:33:52	-129.75	6579

004 00:12:55	-106.68	26081
004 01:54:57	-132.19	26082
004 03:36:59	-157.69	26083
004 05:19:01	176.80	26084
004 07:01:02	151.31	26085
004 08:43:04	125.80	26086
004 10:25:06	100.29	26087
004 12:07:08	74.78	26088
004 13:49:10	49.28	26089
004 15:31:12	23.77	26090
004 17:13:13	-1.73	26091
004 18:55:15	-27.23	26092
004 20:37:17	-52.74	26093
004 22:19:19	-78.25	26094

004 00:35:22	-76.64	17125
004 02:16:37	-101.96	17126
004 03:57:51	-127.26	17127
004 05:39:06	-152.58	17128
004 07:20:20	-177.88	17129
004 09:01:35	156.80	17130
004 10:42:50	131.48	17131
004 12:24:04	106.18	17132
004 14:05:19	80.86	17133
004 15:46:33	55.56	17134
004 17:27:48	30.24	17135
004 19:09:03	4.93	17136
004 20:50:17	-20.38	17137
004 22:31:32	-45.69	17138

004 00:15:58	-155.27	6580
004 01:58:04	179.21	6581
004 03:40:11	153.67	6582
004 05:22:17	128.15	6583
004 07:04:23	102.63	6584
004 08:46:30	77.09	6585
004 10:28:36	51.57	6586
004 12:10:42	26.05	6587
004 13:52:49	5.52	6588
004 15:34:55	-25.01	6589
004 17:17:01	-50.53	6590
004 18:59:08	-76.06	6591
004 20:41:14	-101.58	6592
004 22:23:20	-127.10	6593

005 00:01:21	-103.76	26095
005 01:43:23	-129.26	26096
005 03:25:24	-154.76	26097
005 05:07:26	179.74	26098
005 06:49:28	154.23	26099
005 08:31:30	128.72	26100
005 10:13:32	103.21	26101
005 11:55:34	77.71	26102
005 13:37:35	52.21	26103
005 15:19:37	26.70	26104
005 17:01:39	1.20	26105
005 18:43:41	-24.31	26106
005 20:25:43	-49.82	26107
005 22:07:45	-75.33	26108
005 23:49:46	-100.82	26109

005 00:12:46	-71.00	17139
005 01:54:01	-96.31	17140
005 03:35:15	-121.62	17141
005 05:16:30	-146.93	17142
005 06:57:45	-172.25	17143
005 08:38:59	162.45	17144
005 10:20:14	137.13	17145
005 12:01:28	111.83	17146
005 13:42:43	86.51	17147
005 15:23:58	61.19	17148
005 17:05:12	35.89	17149
005 18:46:27	10.57	17150
005 20:27:41	-14.73	17151
005 22:08:56	-40.05	17152
005 23:50:11	-65.36	17153

005 00:05:27	-152.64	6594
005 01:47:33	-178.16	6595
005 03:29:39	156.32	6596
005 05:11:46	130.78	6597
005 06:53:52	105.26	6598
005 08:35:58	79.74	6599
005 10:18:05	54.21	6600
005 12:00:11	28.68	6601
005 13:42:17	3.16	6602
005 15:24:24	-22.37	6603
005 17:06:30	-47.89	6604
005 18:48:36	-73.41	6605
005 20:30:42	-98.94	6606
005 22:12:49	-124.47	6607
005 23:54:55	-149.99	6608

006 01:31:48	-126.33	26110
006 03:13:50	-151.83	26111
006 04:55:52	-177.34	26112
006 06:37:54	157.15	26113
006 08:19:56	131.64	26114
006 10:01:57	106.15	26115
006 11:43:59	80.64	26116
006 13:26:01	55.13	26117
006 15:08:03	29.63	26118
006 16:50:05	4.12	26119
006 18:32:07	-21.39	26120
006 20:14:08	-46.88	26121
006 21:56:10	-72.39	26122
006 23:38:12	-97.90	26123

006 01:31:25	-90.67	17154
006 03:12:40	-115.98	17155
006 04:53:54	-141.29	17156
006 06:35:09	-166.60	17157
006 08:16:23	168.09	17158
006 09:57:38	142.78	17159
006 11:38:53	117.46	17160
006 13:20:07	92.16	17161
006 15:01:22	66.84	17162
006 16:42:36	41.54	17163
006 18:23:51	16.22	17164
006 20:05:06	-9.10	17165
006 21:46:20	-34.40	17166
006 23:27:35	-59.72	17167

006 01:37:01	-175.51	6609
006 03:19:08	158.95	6610
006 05:01:14	133.43	6611
006 06:43:20	107.91	6612
006 08:25:27	82.37	6613
006 10:07:33	56.85	6614
006 11:49:39	31.33	6615
006 13:31:46	5.80	6616
006 15:13:52	-19.72	6617
006 16:55:58	-45.25	6618
006 18:38:05	-70.78	6619
006 20:20:11	-96.30	6620
006 22:02:17	-121.82	6621
006 23:44:24	-147.36	6622

**SATELLITE C2**  
**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

007 01:08:18	7.66	34055
007 02:53:10	-18.68	34056
007 04:38:03	-45.02	34057
007 06:22:55	-71.36	34058
007 08:07:47	-97.70	34059
007 09:52:39	-124.05	34060
007 11:37:31	-150.39	34061
007 13:22:23	-176.73	34062
007 15:07:15	156.92	34063
007 16:52:07	130.58	34064
007 18:36:59	104.24	34065
007 20:21:51	77.90	34066
007 22:06:43	51.55	34067
007 23:51:35	25.21	34068

**SATELLITE C3**  
**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

007 01:11:47	56.75	27795
007 02:56:42	30.40	27796
007 04:41:37	4.04	27797
007 06:26:32	-22.31	27798
007 08:11:28	-48.67	27799
007 09:56:23	-75.02	27800
007 11:41:18	-101.38	27801
007 13:26:13	-127.73	27802
007 15:11:08	-154.09	27803
007 16:56:03	179.56	27804
007 18:40:58	153.20	27805
007 20:25:53	126.85	27806
007 22:10:48	100.49	27807
007 23:55:44	74.14	27808

**SATELLITE C4**  
**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

007 01:01:55	-77.97	2560
007 02:46:49	-104.32	2561
007 04:31:43	-130.67	2562
007 06:16:37	-157.02	2563
007 08:01:31	176.63	2564
007 09:46:25	150.28	2565
007 11:31:19	123.92	2566
007 13:16:13	97.57	2567
007 15:01:07	71.22	2568
007 16:46:01	44.87	2569
007 18:30:55	18.52	2570
007 20:15:49	-7.83	2571
007 22:00:43	-34.18	2572
007 23:45:37	-60.53	2573

008 01:36:27	-1.13	34069
008 03:21:19	-27.47	34070
008 05:06:11	-53.82	34071
008 06:51:03	-80.16	34072
008 08:35:55	-106.50	34073
008 10:20:47	-132.84	34074
008 12:05:39	-159.19	34075
008 13:50:31	174.47	34076
008 15:35:23	148.13	34077
008 17:20:15	121.79	34078
008 19:05:07	95.44	34079
008 20:50:00	69.10	34080
008 22:34:52	42.76	34081

008 01:40:39	47.78	27809
008 03:25:34	21.43	27810
008 05:10:29	-4.93	27811
008 06:55:24	-31.28	27812
008 08:40:19	-57.64	27813
008 10:25:14	-84.00	27814
008 12:10:09	-110.35	27815
008 13:55:05	-136.70	27816
008 15:40:00	-163.06	27817
008 17:24:55	170.58	27818
008 19:09:50	144.23	27819
008 20:54:45	117.87	27820
008 22:39:40	91.52	27821

008 01:30:31	-86.88	2574
008 03:15:26	-113.23	2575
008 05:00:20	-139.58	2576
008 06:45:14	-165.93	2577
008 08:30:08	167.72	2578
008 10:15:02	141.37	2579
008 11:59:56	115.02	2580
008 13:44:50	88.67	2581
008 15:29:44	62.32	2582
008 17:14:38	35.97	2583
008 18:59:32	9.62	2584
008 20:44:26	-16.73	2585
008 22:29:20	-43.08	2586

009 00:19:44	16.42	34082
009 02:04:36	-9.92	34083
009 03:49:28	-36.27	34084
009 05:34:20	-62.61	34085
009 07:19:12	-88.95	34086
009 09:04:04	-115.30	34087
009 10:48:56	-141.64	34088
009 12:33:48	-167.98	34089
009 14:18:40	165.68	34090
009 16:03:32	139.33	34091
009 17:48:24	112.99	34092
009 19:33:16	86.65	34093
009 21:18:08	60.31	34094
009 23:03:00	33.96	34095

009 00:24:35	65.16	27822
009 02:09:30	38.81	27823
009 03:54:26	12.45	27824
009 05:39:21	-13.90	27825
009 07:24:16	-40.26	27826
009 09:09:11	-66.61	27827
009 10:54:06	-92.97	27828
009 12:39:01	-119.32	27829
009 14:23:56	-145.68	27830
009 16:08:51	-172.03	27831
009 17:53:47	161.61	27832
009 19:38:42	135.26	27833
009 21:23:37	108.90	27834
009 23:08:32	82.55	27835

009 00:14:14	-69.43	2587
009 01:59:08	-95.78	2588
009 03:44:02	-122.14	2589
009 05:28:56	-148.49	2590
009 07:13:50	-174.84	2591
009 08:58:44	158.81	2592
009 10:43:38	132.46	2593
009 12:28:32	106.11	2594
009 14:13:26	79.76	2595
009 15:58:20	53.41	2596
009 17:43:14	27.06	2597
009 19:28:08	.71	2598
009 21:13:02	-25.64	2599
009 22:57:56	-51.99	2600

010 00:47:52	7.62	34096
010 02:32:44	-18.72	34097
010 04:17:36	-45.06	34098
010 06:02:28	-71.41	34099
010 07:47:20	-97.75	34100
010 09:32:12	-124.09	34101
010 11:17:05	-150.43	34102
010 13:01:57	-176.77	34103
010 14:46:49	156.88	34104
010 16:31:41	130.54	34105
010 18:16:33	104.20	34106
010 20:01:25	77.85	34107
010 21:46:17	51.51	34108
010 23:31:09	25.17	34109

010 00:53:27	56.19	27836
010 02:38:22	29.84	27837
010 04:23:17	3.48	27838
010 06:08:12	-22.88	27839
010 07:53:08	-49.23	27840
010 09:38:03	-75.58	27841
010 11:22:58	-101.94	27842
010 13:07:53	-128.30	27843
010 14:52:48	-154.65	27844
010 16:37:43	178.99	27845
010 18:22:38	152.64	27846
010 20:07:33	126.28	27847
010 21:52:28	99.93	27848
010 23:37:24	73.57	27849

010 00:42:50	-78.34	2601
010 02:27:44	-104.69	2602
010 04:12:38	-131.04	2603
010 05:57:32	-157.39	2604
010 07:42:26	176.26	2605
010 09:27:20	149.90	2606
010 11:12:14	123.55	2607
010 12:57:08	97.20	2608
010 14:42:02	70.85	2609
010 16:26:56	44.50	2610
010 18:11:50	18.15	2611
010 19:56:44	-8.20	2612
010 21:41:38	-34.55	2613
010 23:26:32	-60.90	2614

SATELLITE S2						SATELLITE S3						SATELLITE S4							
Ascending Node Predictions						Ascending Node Predictions						Ascending Node Predictions							
Predicting for 182 days						Predicting for 183 days						Predicting for 183 days							
TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg	TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg
007 01:20:14	-123.40	26124		007	01:08:49	-85.02	17168			007	01:26:30	-172.88	6623						
007 03:02:16	-148.91	26125		007	02:50:04	-110.34	17169			007	03:08:36	161.60	6624						
007 04:44:18	-174.42	26126		007	04:31:18	-135.64	17170			007	04:50:43	136.06	6625						
007 06:26:19	160.09	26127		007	06:12:33	-100.96	17171			007	06:32:49	110.54	6626						
007 08:08:21	134.58	26128		007	07:53:48	173.73	17172			007	08:14:55	85.02	6627						
007 09:50:23	109.07	26129		007	09:35:02	148.42	17173			007	09:57:02	59.49	6628						
007 11:32:25	83.56	26130		007	11:16:17	123.11	17174			007	11:39:08	33.97	6629						
007 13:14:27	58.06	26131		007	12:57:31	97.80	17175			007	13:21:14	8.44	6630						
007 14:56:29	32.55	26132		007	14:38:46	72.49	17176			007	15:03:20	-17.08	6631						
007 16:38:30	7.05	26133		007	16:20:01	47.17	17177			007	16:45:27	-42.61	6632						
007 18:20:32	-18.45	26134		007	18:01:15	21.87	17178			007	18:27:33	-68.13	6633						
007 20:02:34	-43.96	26135		007	19:42:30	-3.45	17179			007	20:09:39	-93.65	6634						
007 21:44:36	-69.47	26136		007	21:23:44	-28.75	17180			007	21:51:46	-119.19	6635						
007 23:26:38	-94.98	26137		007	23:04:59	-54.07	17181			007	23:33:52	-144.71	6636						
008 01:08:40	-120.48	26138		008	00:46:14	-79.39	17182			008	01:15:58	-170.23	6637						
008 02:50:41	-145.98	26139		008	02:27:28	-104.69	17183			008	02:58:05	164.23	6638						
008 04:32:43	-171.48	26140		008	04:08:43	-130.01	17184			008	04:40:11	138.71	6639						
008 06:14:45	163.01	26141		008	05:49:57	-155.31	17185			008	06:22:17	113.19	6640						
008 07:56:47	137.50	26142		008	07:31:12	179.37	17186			008	08:04:24	87.66	6641						
008 09:38:49	111.99	26143		008	09:12:26	154.07	17187			008	09:46:30	62.13	6642						
008 11:20:51	86.49	26144		008	10:53:41	128.75	17188			008	11:28:36	36.61	6643						
008 13:02:52	60.99	26145		008	12:34:56	103.44	17189			008	13:10:43	11.08	6644						
008 14:44:54	35.48	26146		008	14:16:10	78.13	17190			008	14:52:49	-14.44	6645						
008 16:26:56	9.98	26147		008	15:57:25	52.82	17191			008	16:34:55	-39.96	6646						
008 18:08:58	-15.53	26148		008	17:38:39	27.51	17192			008	18:17:02	-65.50	6647						
008 19:51:00	-41.04	26149		008	19:19:54	2.20	17193			008	19:59:08	-91.02	6648						
008 21:33:02	-66.55	26150		008	21:01:09	-23.12	17194			008	21:41:14	-116.54	6649						
008 23:15:03	-92.04	26151		008	22:42:23	-48.42	17195			008	23:23:21	-142.08	6650						
009 00:57:05	-117.55	26152		009	00:23:38	-73.74	17196			009	01:05:27	-167.60	6651						
009 02:39:07	-143.05	26153		009	02:04:52	-99.04	17197			009	02:47:33	166.88	6652						
009 04:21:09	-168.56	26154		009	03:46:07	-124.36	17198			009	04:29:40	141.35	6653						
009 06:03:11	165.93	26155		009	05:27:22	-149.68	17199			009	06:11:46	115.82	6654						
009 07:45:13	140.42	26156		009	07:08:36	-174.98	17200			009	07:53:52	90.30	6655						
009 09:27:14	114.93	26157		009	08:49:51	159.70	17201			009	09:35:58	64.78	6656						
009 11:09:16	89.42	26158		009	10:31:05	134.40	17202			009	11:18:05	39.25	6657						
009 12:51:18	63.91	26159		009	12:12:20	109.08	17203			009	13:00:11	13.73	6658						
009 14:33:20	38.41	26160		009	13:53:34	83.78	17204			009	14:42:17	-11.80	6659						
009 16:15:22	12.90	26161		009	15:34:49	58.46	17205			009	16:24:24	-37.33	6660						
009 17:57:24	-12.61	26162		009	17:16:04	33.15	17206			009	18:06:30	-62.85	6661						
009 19:39:25	-38.10	26163		009	18:57:18	7.84	17207			009	19:48:36	-88.37	6662						
009 21:21:27	-63.61	26164		009	20:38:33	-17.47	17208			009	21:30:43	-113.91	6663						
009 23:03:29	-89.12	26165		009	22:19:47	-42.78	17209			009	23:12:49	-139.43	6664						
010 00:45:31	-114.62	26166		010	00:01:02	-68.09	17210			010	00:54:55	-164.95	6665						
010 02:27:33	-140.13	26167		010	01:42:17	-93.41	17211			010	02:37:02	169.51	6666						
010 04:09:35	-165.64	26168		010	03:23:31	-118.71	17212			010	04:19:08	143.99	6667						
010 05:51:36	168.87	26169		010	05:04:46	-144.03	17213			010	06:01:14	118.47	6668						
010 07:33:38	143.36	26170		010	06:46:00	-169.33	17214			010	07:43:21	92.94	6669						
010 09:15:40	117.85	26171		010	08:27:15	165.35	17215			010	09:25:27	67.42	6670						
010 10:57:42	92.34	26172		010	10:08:30	140.03	17216			010	11:07:33	41.89	6671						
010 12:39:44	66.84	26173		010	11:49:44	114.73	17217			010	12:49:40	16.36	6672						
010 14:21:46	41.33	26174		010	13:30:59	89.41	17218			010	14:31:46	-9.16	6673						
010 16:03:47	15.83	26175		010	15:12:13	64.11	17219			010	16:13:52	-34.68	6674						
010 17:45:49	-9.67	26176		010	16:53:28	38.79	17220			010	17:55:59	-60.22	6675						
010 19:27:51	-35.18	26177		010	18:34:42	13.49	17221			010	19:38:05	-85.74	6676						
010 21:09:53	-60.69	26178		010	20:15:57	-11.83	17222			010	21:20:11	-111.26	6677						
010 22:51:55	-86.20	26179		010	21:57:12	-37.14	17223			010	23:02:18	-136.80	6678						
010 23:38:26																			

West longitude is negative (-)

SATELLITE C2				SATELLITE C3				SATELLITE C4									
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions									
Predicting for 183 days				Predicting for 183 days				Predicting for 183 days									
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT						
day	hr	mn	sc	day	hr	mn	sc	day	hr	mn	sc						
deg	dg			deg	dg			deg	dg								
011	01	16	:01	-1.17	34110	011	01	22	:19	47.22	27850	011	01	11	:26	-87.25	2615
011	03	00	:53	-27.52	34111	011	03	07	:14	20.86	27851	011	02	56	:20	-113.60	2616
011	04	45	:45	-53.86	34112	011	04	52	:09	-5.49	27852	011	04	41	:14	-139.95	2617
011	06	30	:37	-80.20	34113	011	06	37	:04	-31.85	27853	011	06	26	:08	-166.30	2618
011	08	15	:29	-106.54	34114	011	08	21	:59	-58.20	27854	011	08	11	:02	167.35	2619
011	10	00	:21	-132.89	34115	011	10	06	:54	-84.56	27855	011	09	55	:56	141.00	2620
011	11	45	:13	-159.23	34116	011	11	51	:49	-110.91	27856	011	11	40	:50	114.65	2621
011	13	30	:05	174.43	34117	011	13	36	:45	-137.27	27857	011	13	25	:44	88.30	2622
011	15	14	:57	148.09	34118	011	15	21	:40	-163.62	27858	011	15	10	:38	61.95	2623
011	16	59	:49	121.74	34119	011	17	06	:35	170.02	27859	011	16	55	:32	35.60	2624
011	18	44	:41	95.40	34120	011	18	51	:30	143.67	27860	011	18	40	:26	9.24	2625
011	20	29	:33	69.06	34121	011	20	36	:25	117.31	27861	011	20	25	:20	-17.11	2626
011	22	14	:25	42.72	34122	011	22	21	:20	90.96	27862	011	22	10	:14	-43.46	2627
011	23	59	:18	16.38	34123							011	23	55	:08	-69.81	2628
012	01	44	:10	-9.97	34124	012	00	06	:15	64.60	27863	012	01	40	:02	-96.16	2629
012	03	29	:02	-36.31	34125	012	01	51	:10	38.24	27864	012	03	24	:56	-122.51	2630
012	05	13	:54	-62.65	34126	012	03	36	:06	11.89	27865	012	05	09	:50	-148.86	2631
012	06	58	:46	-89.00	34127	012	05	21	:01	-14.46	27866	012	06	54	:44	-175.21	2632
012	08	43	:38	-115.34	34128	012	07	05	:56	-40.82	27867	012	08	39	:38	158.44	2633
012	10	28	:30	-141.68	34129	012	08	50	:51	-67.18	27868	012	10	24	:32	132.09	2634
012	12	13	:22	-168.02	34130	012	10	35	:46	-93.53	27869	012	12	09	:26	105.74	2635
012	13	58	:14	165.63	34131	012	12	20	:41	-119.89	27870	012	13	54	:20	79.39	2636
012	15	43	:06	139.29	34132	012	14	05	:36	-146.24	27871	012	15	39	:14	53.04	2637
012	17	27	:58	112.95	34133	012	15	50	:31	-172.60	27872	012	17	24	:08	26.69	2638
012	19	12	:50	86.61	34134	012	17	35	:26	161.05	27873	012	19	09	:02	-34	2639
012	20	57	:42	60.26	34135	012	19	20	:22	134.69	27874	012	20	53	:56	-26.01	2640
012	22	42	:34	33.92	34136	012	21	05	:17	108.34	27875	012	22	38	:50	-52.36	2641
012	22	50	:12			012	22	50	:12	81.98	27876						
013	00	27	:26	7.58	34137	013	00	35	:07	55.63	27877	013	00	23	:44	-78.71	2642
013	02	12	:18	-18.76	34138	013	02	20	:02	29.27	27878	013	02	08	:38	-105.07	2643
013	03	57	:10	-45.11	34139	013	04	04	:57	2.92	27879	013	03	53	:32	-131.42	2644
013	05	42	:02	-71.45	34140	013	05	49	:52	-23.44	27880	013	05	38	:26	-157.77	2645
013	07	26	:54	-97.79	34141	013	07	34	:47	-49.79	27881	013	07	23	:20	175.88	2646
013	09	11	:46	-124.13	34142	013	09	19	:43	-76.15	27882	013	09	08	:14	149.53	2647
013	10	56	:38	-150.48	34143	013	11	04	:38	-102.50	27883	013	10	53	:08	123.18	2648
013	12	41	:31	-176.82	34144	013	12	49	:33	-128.86	27884	013	12	38	:02	96.83	2649
013	14	26	:23	156.84	34145	013	14	34	:28	-155.21	27885	013	14	22	:56	70.48	2650
013	16	11	:15	130.50	34146	013	16	19	:23	178.43	27886	013	16	07	:50	44.13	2651
013	17	56	:07	104.15	34147	013	18	04	:18	152.08	27887	013	17	52	:44	17.78	2652
013	19	40	:59	77.81	34148	013	19	49	:13	125.72	27888	013	19	37	:38	-8.57	2653
013	21	25	:51	51.47	34149	013	21	34	:08	99.36	27889	013	21	22	:32	-34.92	2654
013	23	10	:43	25.13	34150	013	23	19	:03	73.01	27890	013	23	07	:26	-61.27	2655
014	00	55	:35	-1.22	34151	014	01	03	:59	46.66	27891	014	00	52	:20	-87.62	2656
014	02	40	:27	-27.56	34152	014	02	48	:54	20.30	27892	014	02	37	:14	-113.97	2657
014	04	25	:19	-53.90	34153	014	04	33	:49	-6.06	27893	014	04	22	:08	-140.32	2658
014	06	10	:11	-80.24	34154	014	06	18	:44	-32.41	27894	014	06	07	:02	-166.67	2659
014	07	55	:03	-106.59	34155	014	08	03	:39	-58.77	27895	014	07	51	:56	166.98	2660
014	09	39	:55	-132.93	34156	014	09	48	:34	-85.12	27896	014	09	36	:50	140.63	2661
014	11	24	:47	-159.27	34157	014	11	33	:29	-111.48	27897	014	11	21	:44	114.27	2662
014	13	09	:39	174.39	34158	014	13	18	:24	-137.83	27898	014	13	06	:38	87.92	2663
014	14	54	:31	148.04	34159	014	15	03	:20	-164.19	27899	014	14	51	:32	61.57	2664
014	16	39	:23	121.70	34160	014	16	48	:15	169.46	27900	014	16	36	:26	35.22	2665
014	18	24	:15	95.36	34161	014	18	33	:10	143.10	27901	014	18	21	:20	8.87	2666
014	20	09	:07	69.01	34162	014	20	18	:05	116.75	27902	014	20	06	:15	-17.47	2667
014	21	53	:59	42.67	34163	014	22	03	:00	90.39	27903	014	21	51	:09	-43.83	2668
014	23	38	:52	16.33	34164	014	23	47	:55	64.04	27904	014	23	36	:03	-70.18	2669

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT	
day hr mn sc	deg dg			day hr mn sc	deg dg			day hr mn sc	deg dg		
011 00:33:57	-111.70	26180		011 01:19:41	-87.76	17225		011 00:44:24	-162.32	6679	
011 02:15:58	-137.20	26181		011 03:00:55	-113.07	17226		011 02:26:30	172.16	6680	
011 03:58:00	-162.70	26182		011 04:42:10	-138.38	17227		011 04:08:36	146.64	6681	
011 05:40:02	171.79	26183		011 06:23:25	-163.70	17228		011 05:50:43	121.11	6682	
011 07:22:04	146.28	26184		011 08:04:39	171.00	17229		011 07:32:49	95.58	6683	
011 09:04:06	120.77	26185		011 09:45:54	145.68	17230		011 09:14:55	70.06	6684	
011 10:46:08	95.27	26186		011 11:27:08	120.38	17231		011 10:57:02	44.53	6685	
011 12:28:09	69.77	26187		011 13:08:23	95.06	17232		011 12:39:08	19.01	6686	
011 14:10:11	44.26	26188		011 14:49:37	69.76	17233		011 14:21:14	-6.52	6687	
011 15:52:13	18.76	26189		011 16:30:52	44.44	17234		011 16:03:21	-32.05	6688	
011 17:34:15	-6.75	26190		011 18:12:07	19.12	17235		011 17:45:27	-57.57	6689	
011 19:16:17	-32.26	26191		011 19:53:21	-6.18	17236		011 19:27:33	-83.09	6690	
011 20:58:19	-57.77	26192		011 21:34:36	-31.50	17237		011 21:09:40	-108.63	6691	
011 22:40:20	-83.26	26193		011 23:15:50	-56.80	17238		011 22:51:46	-134.15	6692	
012 00:22:22	-108.77	26194		012 00:57:05	-82.12	17239		012 00:33:52	-159.67	6693	
012 02:04:24	-134.28	26195		012 02:38:20	-107.43	17240		012 02:15:59	174.80	6694	
012 03:46:26	-159.78	26196		012 04:19:34	-132.74	17241		012 03:58:05	149.27	6695	
012 05:28:28	174.71	26197		012 06:00:49	-158.05	17242		012 05:40:11	123.75	6696	
012 07:10:30	149.20	26198		012 07:42:03	176.64	17243		012 07:22:18	98.22	6697	
012 08:52:31	123.71	26199		012 09:23:18	151.33	17244		012 09:04:24	72.70	6698	
012 10:34:33	98.20	26200		012 11:04:33	126.01	17245		012 10:46:30	47.17	6699	
012 12:16:35	72.69	26201		012 12:45:47	100.71	17246		012 12:28:37	21.64	6700	
012 13:58:37	47.19	26202		012 14:27:02	75.39	17247		012 14:10:43	-3.88	6701	
012 15:40:39	21.68	26203		012 16:08:16	50.09	17248		012 15:52:49	-29.40	6702	
012 17:22:41	-3.83	26204		012 17:49:31	24.77	17249		012 17:34:56	-54.94	6703	
012 19:04:42	-29.32	26205		012 19:30:45	-5.53	17250		012 19:17:02	-80.46	6704	
012 20:46:44	-54.83	26206		012 21:12:00	-25.85	17251		012 20:59:08	-105.98	6705	
012 22:28:46	-80.34	26207		012 22:53:15	-51.17	17252		012 22:41:14	-131.50	6706	
013 00:10:48	-105.85	26208		013 00:34:29	-76.47	17253		013 00:23:21	-157.04	6707	
013 01:52:50	-131.35	26209		013 02:15:44	-101.79	17254		013 02:05:27	177.44	6708	
013 03:34:52	-156.86	26210		013 03:56:58	-127.09	17255		013 03:47:33	151.92	6709	
013 05:16:53	177.65	26211		013 05:38:13	-152.41	17256		013 05:29:40	126.39	6710	
013 06:58:55	152.14	26212		013 07:19:28	-177.72	17257		013 07:11:46	100.86	6711	
013 08:40:57	126.63	26213		013 09:00:42	156.97	17258		013 08:53:52	75.34	6712	
013 10:22:59	101.12	26214		013 10:41:57	131.66	17259		013 10:35:59	49.81	6713	
013 12:05:01	75.62	26215		013 12:23:11	106.35	17260		013 12:18:05	24.29	6714	
013 13:47:02	50.12	26216		013 14:04:26	81.04	17261		013 14:00:11	-1.23	6715	
013 15:29:04	24.61	26217		013 15:45:40	55.73	17262		013 15:42:18	-26.77	6716	
013 17:11:06	-8.89	26218		013 17:26:55	30.42	17263		013 17:24:24	-52.29	6717	
013 18:53:08	-26.40	26219		013 19:08:10	5.10	17264		013 19:06:30	-77.81	6718	
013 20:35:10	-51.91	26220		013 20:49:24	-20.20	17265		013 20:48:37	-103.35	6719	
013 22:17:12	-77.42	26221		013 22:30:39	-45.52	17266		013 22:30:43	-128.87	6720	
013 23:59:13	-102.91	26222									
014 01:41:15	-128.42	26223		014 00:11:53	-70.82	17267		014 00:12:49	-154.39	6721	
014 03:23:17	-153.93	26224		014 01:53:08	-96.14	17268		014 01:54:56	-179.92	6722	
014 05:05:19	-179.43	26225		014 03:34:23	-121.46	17269		014 03:37:02	154.55	6723	
014 06:47:21	155.06	26226		014 05:15:37	-146.76	17270		014 05:19:08	129.03	6724	
014 08:29:23	129.55	26227		014 06:56:52	-172.08	17271		014 07:01:15	103.50	6725	
014 10:11:24	104.06	26228		014 08:38:06	162.62	17272		014 08:43:21	77.98	6726	
014 11:53:26	78.55	26229		014 10:19:21	137.30	17273		014 10:25:27	52.46	6727	
014 13:35:28	53.04	26230		014 12:00:36	111.99	17274		014 12:07:34	26.92	6728	
014 15:17:30	27.54	26231		014 13:41:50	86.68	17275		014 13:49:40	1.40	6729	
014 16:59:32	2.03	26232		014 15:23:05	61.37	17276		014 15:31:46	-24.12	6730	
014 18:41:34	-23.48	26233		014 17:04:19	36.06	17277		014 17:13:52	-49.64	6731	
014 20:23:35	-48.97	26234		014 18:45:34	10.75	17278		014 18:55:59	-75.18	6732	
014 22:05:37	-74.48	26235		014 20:26:48	-14.56	17279		014 20:38:05	-100.70	6733	
014 23:47:39	-99.99	26236		014 22:08:03	-39.87	17280		014 22:20:11	-126.22	6734	
				014 23:49:18	-65.19	17281					

**SATELLITE C2**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

015	01:23:44	-10.01	34165
015	03:08:36	-36.35	34166
015	04:53:28	-62.70	34167
015	06:38:20	-89.04	34168
015	08:23:12	-115.38	34169
015	10:08:04	-141.72	34170
015	11:52:56	-168.07	34171
015	13:37:48	-165.59	34172
015	15:22:40	-139.25	34173
015	17:07:32	-112.91	34174
015	18:52:24	-86.56	34175
015	20:37:16	-60.22	34176
015	22:22:08	33.88	34177

**SATELLITE C3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

015	01:32:50	37.68	27905
015	03:17:45	11.33	27906
015	05:02:40	-15.03	27907
015	06:47:36	-41.38	27908
015	08:32:31	-67.74	27909
015	10:17:26	-94.09	27910
015	12:02:21	-120.45	27911
015	13:47:16	-146.80	27912
015	15:32:11	-173.16	27913
015	17:17:06	160.48	27914
015	19:02:01	134.13	27915
015	20:46:57	107.78	27916
015	22:31:52	81.42	27917

**SATELLITE C4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

015	01:20:57	-96.53	2670
015	03:05:51	-122.88	2671
015	04:50:45	-149.23	2672
015	06:35:39	-175.58	2673
015	08:20:33	158.07	2674
015	10:05:27	131.72	2675
015	11:50:21	105.37	2676
015	13:35:15	79.02	2677
015	15:20:09	52.67	2678
015	17:05:03	26.32	2679
015	18:49:57	-.03	2680
015	20:34:51	-26.38	2681
015	22:19:45	-52.73	2682

016	00:07:00	7.54	34178
016	01:51:52	-18.81	34179
016	03:36:44	-45.15	34180
016	05:21:36	-71.49	34181
016	07:06:28	-97.84	34182
016	08:51:20	-124.18	34183
016	10:36:13	-150.52	34184
016	12:21:05	-176.86	34185
016	14:05:57	156.80	34186
016	15:50:49	130.45	34187
016	17:35:41	104.11	34188
016	19:20:33	77.77	34189
016	21:05:25	51.43	34190
016	22:50:17	25.08	34191

016	00:16:47	55.07	27918
016	02:01:42	28.71	27919
016	03:46:37	2.35	27920
016	05:31:32	-24.00	27921
016	07:16:27	-50.36	27922
016	09:01:22	-76.71	27923
016	10:46:17	-103.07	27924
016	12:31:13	-129.42	27925
016	14:16:08	-155.78	27926
016	16:01:03	177.87	27927
016	17:45:58	151.51	27928
016	19:30:53	125.16	27929
016	21:15:48	98.80	27930
016	23:00:43	72.45	27931

016	00:04:39	-79.08	2683
016	01:49:33	-105.43	2684
016	03:34:27	-131.78	2685
016	05:19:21	-158.13	2686
016	07:04:15	175.51	2687
016	08:49:09	149.16	2688
016	10:34:03	122.81	2689
016	12:18:57	96.46	2690
016	14:03:51	70.11	2691
016	15:48:45	43.76	2692
016	17:33:39	17.91	2693
016	19:18:33	-8.94	2694
016	21:03:27	-35.29	2695
016	22:48:21	-61.64	2696

017	00:35:09	-1.26	34192
017	02:20:01	-27.60	34193
017	04:04:53	-53.94	34194
017	05:49:45	-80.29	34195
017	07:34:37	-106.63	34196
017	09:19:29	-132.97	34197
017	11:04:21	-159.32	34198
017	12:49:13	174.34	34199
017	14:34:05	148.00	34200
017	16:18:57	121.66	34201
017	18:03:49	95.31	34202
017	19:48:41	68.97	34203
017	21:33:34	42.63	34204
017	23:18:26	16.29	34205

017	00:45:38	46.09	27932
017	02:30:34	19.74	27933
017	04:15:29	-6.62	27934
017	06:00:24	-32.97	27935
017	07:45:19	-59.33	27936
017	09:30:14	-85.68	27937
017	11:15:09	-112.04	27938
017	13:00:04	-138.40	27939
017	14:44:59	-164.75	27940
017	16:29:54	168.89	27941
017	18:14:50	142.54	27942
017	19:59:45	116.19	27943
017	21:44:40	89.83	27944
017	23:29:35	63.47	27945

017	00:33:15	-87.99	2697
017	02:18:09	-114.34	2698
017	04:03:03	-140.69	2699
017	05:47:57	-167.04	2700
017	07:32:51	166.61	2701
017	09:17:45	140.26	2702
017	11:02:39	113.91	2703
017	12:47:33	87.56	2704
017	14:32:27	61.21	2705
017	16:17:21	34.86	2706
017	18:02:15	8.51	2707
017	19:47:09	-17.85	2708
017	21:32:03	-44.20	2709
017	23:16:57	-70.55	2710

018	01:03:18	-10.05	34206
018	02:48:10	-36.40	34207
018	04:33:02	-62.74	34208
018	06:17:54	-89.08	34209
018	08:02:46	-115.42	34210
018	09:47:38	-141.77	34211
018	11:32:30	-168.11	34212
018	13:17:22	165.55	34213
018	15:02:14	139.20	34214
018	16:47:06	112.86	34215
018	18:31:58	86.52	34216
018	20:16:50	60.18	34217
018	22:01:42	33.83	34218
018	23:46:34	7.49	34219

018	01:14:30	37.12	27946
018	02:59:25	10.76	27947
018	04:44:20	-15.59	27948
018	06:29:15	-41.95	27949
018	08:14:11	-68.30	27950
018	09:59:06	-94.66	27951
018	11:44:01	-121.01	27952
018	13:28:56	-147.37	27953
018	15:13:51	-173.72	27954
018	16:58:46	159.92	27955
018	18:43:41	133.57	27956
018	20:28:36	107.21	27957
018	22:13:31	80.86	27958
018	23:58:27	54.50	27959

018	01:01:51	-96.90	2711
018	02:46:45	-123.25	2712
018	04:31:39	-149.60	2713
018	06:16:33	-175.95	2714
018	08:01:27	157.70	2715
018	09:46:21	131.35	2716
018	11:31:15	105.00	2717
018	13:16:09	78.65	2718
018	15:01:03	52.30	2719
018	16:45:57	23.95	2720
018	18:30:51	-.40	2721
018	20:15:45	-26.75	2722
018	22:00:39	-53.10	2723
018	23:45:33	-79.45	2724

SATELLITE S2							SATELLITE S3							SATELLITE S4							
Ascending Node Predictions							Ascending Node Predictions							Ascending Node Predictions							
Predicting for 182 days							Predicting for 183 days							Predicting for 183 days							
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg	day	hr	mn	sc
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc
015 01:29:41	-125.50	26237	015 01:30:32	-90.49	17282	015 00:02:18	-151.76	6735	015 01:11:43	-151.00	26238	015 03:11:47	-115.81	17283	015 01:44:24	-177.28	6736	015 03:11:43	-151.28	6736	
015 04:53:45	-176.51	26239	015 04:53:01	-141.11	17284	015 03:26:30	157.20	6737	015 04:53:45	-176.51	26239	015 05:08:37	131.67	6738	015 05:08:37	131.67	6738	015 05:08:37	131.67	6738	
015 06:35:46	157.99	26240	015 06:34:16	-166.43	17285	015 06:50:43	106.15	6739	015 08:17:48	132.49	26241	015 08:15:31	168.25	17286	015 08:32:49	80.62	6740	015 08:32:49	80.62	6740	
015 09:59:50	106.98	26242	015 09:56:45	142.95	17287	015 10:14:56	55.09	6741	015 11:41:52	81.47	26243	015 11:38:00	117.63	17288	015 11:57:02	29.57	6742	015 11:57:02	29.57	6742	
015 13:23:54	55.96	26244	015 13:19:14	92.33	17289	015 13:39:08	4.05	6743	015 15:05:56	30.46	26245	015 15:00:29	67.01	17290	015 15:21:15	-21.49	6744	015 15:21:15	-21.49	6744	
015 16:47:57	4.96	26246	015 16:41:44	41.70	17291	015 17:03:21	-47.01	6745	015 18:29:59	-20.54	26247	015 18:22:58	16.39	17292	015 18:45:27	-72.53	6746	015 18:45:27	-72.53	6746	
015 20:12:01	-46.05	26248	015 20:04:13	-8.92	17293	015 20:27:34	-98.07	6747	015 21:54:03	-71.56	26249	015 21:45:27	-34.23	17294	015 22:09:40	-123.59	6748	015 22:09:40	-123.59	6748	
015 23:36:05	-97.07	26250	015 23:26:42	-59.54	17295	015 23:51:46	-149.11	6749	015 23:51:46	-149.11	6749										
016 01:18:07	-122.57	26251	016 01:07:56	-84.85	17296	016 01:33:53	-174.64	6750	016 03:00:08	-148.07	26252	016 02:49:11	-110.16	17297	016 03:15:59	159.84	6751	016 03:15:59	159.84	6751	
016 04:42:10	-173.58	26253	016 04:30:26	-135.48	17298	016 04:58:05	134.31	6752	016 06:24:12	160.92	26254	016 06:11:40	-160.78	17299	016 06:40:11	108.79	6753	016 06:40:11	108.79	6753	
016 08:06:14	135.41	26255	016 07:52:55	173.90	17300	016 08:22:18	83.26	6754	016 09:48:16	109.90	26256	016 09:34:09	148.60	17301	016 10:04:24	57.74	6755	016 10:04:24	57.74	6755	
016 11:30:17	84.41	26257	016 11:15:24	123.28	17302	016 11:46:30	32.22	6756	016 13:12:19	58.90	26258	016 12:56:39	97.96	17303	016 13:28:37	6.68	6757	016 13:28:37	6.68	6757	
016 14:54:21	33.39	26259	016 14:37:53	72.66	17304	016 15:10:43	-18.84	6758	016 16:36:23	7.88	26260	016 16:19:08	47.34	17305	016 16:52:49	-44.36	6759	016 16:52:49	-44.36	6759	
016 18:18:25	-17.62	26261	016 18:00:22	22.04	17306	016 18:34:56	-69.90	6760	016 20:00:27	-43.13	26262	016 19:41:37	-3.28	17307	016 20:17:02	-95.42	6761	016 20:17:02	-95.42	6761	
016 21:42:28	-68.62	26263	016 21:22:51	-28.58	17308	016 21:59:08	-120.94	6762	016 23:24:30	-94.13	26264	016 23:04:06	-53.90	17309	016 23:41:15	-146.47	6763	016 23:41:15	-146.47	6763	
017 01:06:32	-119.64	26265	017 00:45:21	-79.21	17310	017 01:23:21	-172.00	6764	017 02:48:34	-145.15	26266	017 02:26:35	-104.52	17311	017 03:05:27	162.48	6765	017 03:05:27	162.48	6765	
017 04:30:36	-170.65	26267	017 04:07:50	-129.83	17312	017 04:47:34	136.95	6766	017 06:12:38	163.84	26268	017 05:49:04	-155.14	17313	017 06:29:40	111.43	6767	017 06:29:40	111.43	6767	
017 07:54:39	138.34	26269	017 07:30:19	179.55	17314	017 08:11:46	85.91	6768	017 09:36:41	112.84	26270	017 09:11:34	154.23	17315	017 09:53:53	60.37	6769	017 09:53:53	60.37	6769	
017 11:18:43	87.33	26271	017 10:52:48	128.93	17316	017 11:35:59	34.85	6770	017 13:00:45	61.82	26272	017 12:34:03	103.61	17317	017 13:18:05	9.33	6771	017 13:18:05	9.33	6771	
017 14:42:47	36.31	26273	017 14:15:17	78.31	17318	017 15:00:12	-16.21	6772	017 16:24:49	10.81	26274	017 15:56:32	52.99	17319	017 16:42:18	-41.73	6773	017 16:42:18	-41.73	6773	
017 18:06:50	-14.69	26275	017 17:37:47	27.67	17320	017 18:24:24	-67.25	6774	017 19:48:52	-40.20	26276	017 19:19:01	2.37	17321	017 20:06:31	-92.78	6775	017 20:06:31	-92.78	6775	
017 21:30:54	-65.70	26277	017 21:00:16	-22.95	17322	017 21:48:37	-118.31	6776	017 23:12:56	-91.21	26278	017 22:41:30	-48.25	17323	017 23:30:43	-143.83	6777	017 23:30:43	-143.83	6777	
018 00:54:58	-116.72	26279	018 00:22:45	-73.57	17324	018 01:12:49	-169.35	6778	018 02:37:00	-142.23	26280	018 02:03:59	-98.87	17325	018 02:54:56	165.12	6779	018 02:54:56	165.12	6779	
018 04:19:01	-167.72	26281	018 03:45:14	-124.19	17326	018 04:37:02	139.59	6780	018 06:01:03	166.77	26282	018 05:26:29	-149.50	17327	018 06:19:08	114.07	6781	018 06:19:08	114.07	6781	
018 07:43:05	141.27	26283	018 07:07:43	-174.81	17328	018 08:01:15	88.54	6782	018 09:25:07	115.76	26284	018 08:48:58	159.88	17329	018 09:43:21	63.02	6783	018 09:43:21	63.02	6783	
018 11:07:09	90.25	26285	018 10:30:12	134.57	17330	018 11:25:27	37.50	6784	018 12:49:11	64.74	26286	018 12:11:27	109.26	17331	018 13:07:34	11.96	6785	018 13:07:34	11.96	6785	
018 14:31:12	39.25	26287	018 13:52:42	83.94	17332	018 14:49:40	-13.56	6786	018 16:13:14	13.74	26288	018 15:33:56	58.64	17333	018 16:31:46	-39.08	6787	018 16:31:46	-39.08	6787	
018 17:55:16	-11.77	26289	018 17:15:11	33.32	17334	018 18:13:53	-64.62	6788	018 19:37:18	-37.27	26290	018 18:56:25	8.02	17335	018 19:55:59	-90.14	6789	018 19:55:59	-90.14	6789	
018 21:19:20	-62.78	26291	018 20:37:40	-17.30	17336	018 21:38:05	-115.66	6790	018 23:01:21	-88.28	26292	018 22:18:55	-42.62	17337	018 23:20:12	-141.19	6791	018 23:20:12	-141.19	6791	

SATELLITE C2							SATELLITE C3							SATELLITE C4						
Ascending Node Predictions							Ascending Node Predictions							Ascending Node Predictions						
Predicting for 183 days							Predicting for 183 days							Predicting for 183 days						
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	
day	hr	mn	sc	day	hr	mn	sc	day	hr	mn	sc	day	hr	mn	sc	day	hr	mn	sc	
deg	dg			deg	dg			deg	dg			deg	dg			deg	dg			
019	01	:31	:26	-18.85	34220	019	01	:43	:22	28.15	27960	019	01	:30	:27	-105.80	2725			
019	03	:16	:18	-45.19	34221	019	03	:28	:17	1.79	27961	019	03	:15	:21	-132.15	2726			
019	05	:01	:10	-71.54	34222	019	05	:13	:12	-24.56	27962	019	05	:00	:15	-158.50	2727			
019	06	:46	:02	-97.88	34223	019	06	:58	:07	-50.92	27963	019	06	:45	:09	175.15	2728			
019	08	:30	:55	-124.22	34224	019	08	:43	:02	-77.27	27964	019	08	:30	:03	148.79	2729			
019	10	:15	:47	-150.56	34225	019	10	:27	:57	-103.63	27965	019	10	:14	:57	122.44	2730			
019	12	:00	:39	-176.90	34226	019	12	:12	:52	-129.99	27966	019	11	:59	:51	96.09	2731			
019	13	:45	:31	156.75	34227	019	13	:57	:47	-156.34	27967	019	13	:44	:45	69.74	2732			
019	15	:30	:23	130.41	34228	019	15	:42	:43	177.31	27968	019	15	:29	:39	43.39	2733			
019	17	:15	:15	104.07	34229	019	17	:27	:38	150.95	27969	019	17	:14	:33	17.04	2734			
019	19	:00	:07	77.72	34230	019	19	:12	:33	124.60	27970	019	18	:59	:27	-9.31	2735			
019	20	:44	:59	51.38	34231	019	20	:57	:28	98.24	27971	019	20	:44	:21	-35.66	2736			
019	22	:29	:51	25.04	34232	019	22	:42	:23	71.88	27972	019	22	:29	:15	-62.01	2737			
020	00	:14	:43	-1.30	34233	020	00	:27	:18	45.53	27973	020	00	:14	:09	-88.36	2738			
020	01	:59	:35	-27.65	34234	020	02	:12	:13	19.17	27974	020	01	:59	:03	-114.71	2739			
020	03	:44	:27	-53.99	34235	020	03	:57	:08	-7.18	27975	020	03	:43	:57	-141.06	2740			
020	05	:29	:19	-80.33	34236	020	05	:42	:04	-33.53	27976	020	05	:28	:51	-167.41	2741			
020	07	:14	:11	-106.67	34237	020	07	:26	:59	-59.89	27977	020	07	:13	:45	166.24	2742			
020	08	:59	:03	-133.02	34238	020	09	:11	:54	-86.25	27978	020	08	:58	:39	139.89	2743			
020	10	:43	:55	-159.36	34239	020	10	:56	:49	-112.60	27979	020	10	:43	:33	113.54	2744			
020	12	:28	:47	174.30	34240	020	12	:41	:44	-138.96	27980	020	12	:28	:27	87.19	2745			
020	14	:13	:39	147.96	34241	020	14	:26	:39	-165.31	27981	020	14	:13	:21	60.84	2746			
020	15	:58	:31	121.61	34242	020	16	:11	:34	168.33	27982	020	15	:58	:15	34.49	2747			
020	17	:43	:24	95.27	34243	020	17	:56	:29	141.98	27983	020	17	:43	:09	8.14	2748			
020	19	:28	:16	68.93	34244	020	19	:41	:24	115.62	27984	020	19	:28	:03	-18.21	2749			
020	21	:13	:08	42.59	34245	020	21	:26	:20	89.27	27985	020	21	:12	:57	-44.57	2750			
020	22	:58	:00	16.24	34246	020	23	:11	:15	62.91	27986	020	22	:57	:51	-70.92	2751			
021	00	:42	:52	-10.10	34247	021	00	:56	:10	36.56	27987	021	00	:42	:45	-97.27	2752			
021	02	:27	:44	-36.44	34248	021	02	:41	:05	10.20	27988	021	02	:27	:39	-123.62	2753			
021	04	:12	:36	-62.78	34249	021	04	:26	:00	-16.15	27989	021	04	:12	:33	-149.97	2754			
021	05	:57	:28	-89.13	34250	021	06	:10	:55	-42.51	27990	021	05	:57	:27	-176.32	2755			
021	07	:42	:20	-115.47	34251	021	07	:55	:50	-68.86	27991	021	07	:42	:21	157.33	2756			
021	09	:27	:12	-141.81	34252	021	09	:40	:45	-95.22	27992	021	09	:27	:15	130.98	2757			
021	11	:12	:04	-168.15	34253	021	11	:25	:41	-121.57	27993	021	11	:12	:09	104.63	2758			
021	12	:56	:56	165.50	34254	021	13	:10	:36	-147.93	27994	021	12	:57	:03	78.28	2759			
021	14	:41	:48	139.16	34255	021	14	:55	:31	-174.28	27995	021	14	:41	:57	51.93	2760			
021	16	:26	:40	112.82	34256	021	16	:40	:26	159.36	27996	021	16	:26	:51	25.58	2761			
021	18	:11	:32	86.48	34257	021	18	:25	:21	133.01	27997	021	18	:11	:45	-7.77	2762			
021	19	:56	:24	60.13	34258	021	20	:10	:16	106.65	27998	021	19	:56	:39	-27.12	2763			
021	21	:41	:16	33.79	34259	021	21	:55	:11	80.29	27999	021	21	:41	:33	-53.47	2764			
021	23	:26	:08	7.45	34260	021	23	:40	:06	53.94	28000	021	23	:26	:27	-79.82	2765			
022	01	:11	:00	-18.90	34261	022	01	:25	:01	27.58	28001	022	01	:11	:21	-106.17	2766			
022	02	:55	:52	-45.24	34262	022	03	:09	:57	1.23	28002	022	02	:56	:15	-132.52	2767			
022	04	:40	:45	-71.58	34263	022	04	:54	:52	-25.13	28003	022	04	:41	:09	-158.87	2768			
022	06	:25	:37	-97.92	34264	022	06	:39	:47	-51.48	28004	022	06	:26	:03	174.78	2769			
022	08	:10	:29	-124.26	34265	022	08	:24	:42	-77.84	28005	022	08	:10	:57	148.43	2770			
022	09	:55	:21	-150.61	34266	022	10	:09	:37	-104.19	28006	022	09	:55	:51	122.08	2771			
022	11	:40	:13	-176.95	34267	022	11	:54	:32	-130.55	28007	022	11	:40	:45	95.72	2772			
022	13	:25	:05	156.71	34268	022	13	:39	:27	-156.90	28008	022	13	:25	:39	69.37	2773			
022	15	:09	:57	130.37	34269	022	15	:24	:22	176.74	28009	022	15	:10	:33	43.02	2774			
022	16	:54	:49	104.02	34270	022	17	:09	:17	150.39	28010	022	16	:55	:27	16.67	2775			
022	18	:39	:41	77.68	34271	022	18	:54	:13	124.03	28011	022	18	:40	:21	-9.68	2776			
022	20	:24	:33	51.34	34272	022	20	:39	:08	97.68	28012	022	20	:25	:15	-36.03	2777			
022	22	:09	:25	25.00	34273	022	22	:24	:03	71.32	28013	022	22	:10	:09	-62.38	2778			
022	23	:54	:17	-1.35	34274							022	23	:55	:03	-88.73	2779			

West longitude is negative (-)

SATELLITE S2								SATELLITE S3								SATELLITE S4											
Ascending Node Predictions								Ascending Node Predictions								Ascending Node Predictions											
Predicting for 182 days								Predicting for 183 days								Predicting for 183 days											
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg
019 00:43:23	-113.78	26293		019 00:00:09	-67.92	17338		019 01:02:18	-166.72	6792		019 02:44:24	167.76	6793													
019 02:25:25	-139.29	26294		019 01:41:24	-93.24	17339		019 04:26:31	142.23	6794		019 06:08:37	116.71	6795													
019 04:07:27	-164.80	26295		019 03:22:38	-118.54	17340		019 07:50:43	91.19	6796		019 09:32:50	65.65	6797													
019 05:49:29	169.69	26296		019 05:03:53	-143.86	17341		019 11:14:56	40.13	6798		019 12:57:02	14.61	6799													
019 07:31:31	144.19	26297		019 06:45:07	-169.16	17342		019 14:39:09	-10.93	6800		019 16:21:15	-36.45	6801													
019 09:13:32	118.69	26298		019 08:26:22	165.52	17343		019 18:03:21	-61.97	6802		019 19:45:27	-87.49	6803													
019 10:55:34	93.19	26299		019 10:07:37	140.21	17344		019 21:27:34	-113.03	6804		019 23:09:40	-138.55	6805													
019 12:37:36	67.68	26300		019 11:48:51	114.90	17345																					
019 14:19:38	42.17	26301		019 13:30:06	89.59	17346																					
019 16:01:40	16.66	26302		019 15:11:20	64.28	17347																					
019 17:43:42	-8.84	26303		019 16:52:35	38.97	17348																					
019 19:25:43	-34.34	26304		019 18:33:50	13.65	17349																					
019 21:07:45	-59.85	26305		019 20:15:04	-11.65	17350																					
019 22:49:47	-85.35	26306		019 21:56:19	-36.97	17351																					
				019 23:37:33	-62.27	17352																					
020 00:31:49	-110.86	26307		020 01:18:48	-87.59	17353		020 00:51:46	-164.07	6806		020 02:33:53	170.40	6807													
020 02:13:51	-136.37	26308		020 03:00:02	-112.89	17354		020 04:15:59	144.88	6808		020 05:58:05	119.35	6809													
020 03:55:53	-161.88	26309		020 04:41:17	-138.21	17355		020 07:40:12	93.82	6810		020 09:22:18	68.30	6811													
020 05:37:54	172.63	26310		020 06:22:32	-163.53	17356		020 11:04:24	42.78	6812		020 12:46:31	17.24	6813													
020 07:19:56	147.12	26311		020 08:03:46	171.17	17357		020 14:28:37	-8.28	6814		020 16:10:43	-33.80	6815													
020 09:01:58	121.61	26312		020 09:45:01	145.85	17358		020 17:52:50	-59.34	6816		020 19:34:56	-84.86	6817													
020 10:44:00	96.11	26313		020 11:26:15	120.55	17359		020 22:59:09	-135.91	6819		020 23:09:40	-138.55	6805													
020 12:26:02	70.60	26314		020 13:07:30	95.23	17360																					
020 14:08:04	45.09	26315		020 14:48:45	69.92	17361																					
020 15:50:05	19.60	26316		020 16:29:59	44.61	17362																					
020 17:32:07	-5.91	26317		020 18:11:14	19.30	17363																					
020 19:14:09	-31.42	26318		020 19:52:28	-6.01	17364																					
020 20:56:11	-56.92	26319		020 21:33:43	-31.32	17365																					
020 22:38:13	-82.43	26320		020 23:14:58	-56.64	17366																					
021 00:20:14	-107.93	26321		021 00:56:12	-81.94	17367		021 00:41:15	-161.43	6820		021 02:23:21	173.04	6821													
021 02:02:16	-133.43	26322		021 02:37:27	-107.26	17368		021 04:05:28	147.51	6822		021 05:47:34	121.99	6823													
021 03:44:18	-158.94	26323		021 04:18:41	-132.56	17369		021 07:29:40	96.47	6824		021 09:11:47	70.93	6825													
021 05:26:20	175.55	26324		021 05:59:56	-157.88	17370		021 10:53:53	45.41	6826		021 12:35:59	19.89	6827													
021 07:08:22	150.04	26325		021 07:41:10	176.82	17371		021 14:18:05	-5.63	6828		021 16:00:12	-31.17	6829													
021 08:50:24	124.54	26326		021 09:22:25	151.50	17372		021 17:42:18	-56.69	6830		021 19:24:24	-82.21	6831													
021 10:32:25	99.04	26327		021 11:03:40	126.18	17373		021 21:06:31	-107.74	6832		021 22:48:37	-133.27	6833													
021 12:14:27	73.53	26328		021 12:44:54	100.88	17374																					
021 13:56:29	48.03	26329		021 14:26:09	75.56	17375																					
021 15:38:31	22.52	26330		021 16:07:23	50.26	17376																					
021 17:20:33	-2.99	26331		021 17:48:38	24.94	17377																					
021 19:02:35	-28.50	26332		021 19:29:53	-3.37	17378																					
021 20:44:36	-53.99	26333		021 21:11:07	-25.68	17379																					
021 22:26:38	-79.50	26334		021 22:52:22	-50.99	17380																					
022 00:08:40	-105.00	26335		022 00:33:36	-76.30	17381		022 00:30:43	-158.79	6834		022 02:12:50	175.68	6835													
022 01:50:42	-130.51	26336		022 02:14:51	-101.61	17382		022 03:54:56	150.16	6836		022 05:37:02	124.64	6837													
022 03:32:44	-156.02	26337		022 03:56:06	-126.93	17383		022 07:19:09	99.10	6838		022 09:01:15	73.58	6839													
022 05:14:46	178.47	26338		022 05:37:20	-152.23	17384		022 10:43:21	48.06	6840		022 12:25:28	22.52	6841													
022 06:56:47	152.98	26339		022 07:18:35	-177.55	17385		022 14:07:34	-3.00	6842		022 15:49:40	-28.52	6843													
022 08:38:49	127.47	26340		022 08:59:49	157.15	17386		022 17:31:47	-54.05	6844		022 19:13:53	-79.58	6845													
022 10:20:51	101.96	26341		022 10:41:04	131.83	17387		022 20:55:59	-105.10	6846		022 22:38:06	-130.63	6847													
022 12:02:53	76.46	26342		022 12:22:18	106.53	17388																					
022 13:44:55	50.95	26343		022 14:03:33	81.21	17389																					
022 15:26:56	25.45	26344		022 15:44:48	55.89	17390																					
022 17:08:58	-0.05	26345		022 17:26:02	30.59	17391																					
022 18:51:00	-25.56	26346		022 19:07:17	5.27	17392																					

SATELLITE C2				SATELLITE C3				SATELLITE C4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 183 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	day	hr mn sc	deg dg
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg
023 01:39:09	-27.69	34275	023 00:08:58	44.97	28014	023 01:39:57	-115.08	2780			
023 03:24:01	-54.03	34276	023 01:53:53	18.61	28015	023 03:24:51	-141.43	2781			
023 05:08:53	-80.38	34277	023 03:38:48	-7.74	28016	023 05:09:45	-167.78	2782			
023 06:53:45	-106.72	34278	023 05:23:43	-34.10	28017	023 06:54:39	165.87	2783			
023 08:38:37	-133.06	34279	023 07:08:38	-60.46	28018	023 08:39:33	139.52	2784			
023 10:23:29	-159.40	34280	023 08:53:34	-86.81	28019	023 10:24:27	113.17	2785			
023 12:08:21	174.25	34281	023 10:38:29	-113.16	28020	023 12:09:21	86.82	2786			
023 13:53:14	147.91	34282	023 12:23:24	-139.52	28021	023 13:54:15	60.47	2787			
023 15:38:06	121.57	34283	023 14:08:19	-165.87	28022	023 15:39:09	34.12	2788			
023 17:22:58	95.23	34284	023 15:53:14	167.77	28023	023 17:24:03	7.77	2789			
023 19:07:50	68.89	34285	023 17:38:09	141.41	28024	023 19:08:57	-18.58	2790			
023 20:52:42	42.54	34286	023 19:23:04	115.06	28025	023 20:53:51	-44.93	2791			
023 22:37:34	16.20	34287	023 21:07:59	88.70	28026	023 22:38:45	-71.28	2792			
			023 22:52:54	62.35	28027						
024 00:22:26	-10.14	34288	024 00:37:50	36.00	28028	024 00:23:39	-97.63	2793			
024 02:07:18	-36.48	34289	024 02:22:45	9.64	28029	024 02:08:33	-123.98	2794			
024 03:52:10	-62.83	34290	024 04:07:40	-16.72	28030	024 03:53:27	-150.34	2795			
024 05:37:02	-89.17	34291	024 05:52:35	-43.07	28031	024 05:38:21	-176.69	2796			
024 07:21:54	-115.51	34292	024 07:37:30	-69.43	28032	024 07:23:15	156.96	2797			
024 09:06:46	-141.86	34293	024 09:22:25	-95.78	28033	024 09:08:09	130.61	2798			
024 10:51:38	-168.20	34294	024 11:07:20	-122.14	28034	024 10:53:03	104.26	2799			
024 12:36:30	165.46	34295	024 12:52:15	-148.49	28035	024 12:37:57	77.91	2800			
024 14:21:22	139.12	34296	024 14:37:10	-174.85	28036	024 14:22:51	51.56	2801			
024 16:06:14	112.77	34297	024 16:22:06	158.80	28037	024 16:07:45	25.21	2802			
024 17:51:06	86.43	34298	024 18:07:01	132.44	28038	024 17:52:39	-1.14	2803			
024 19:35:58	60.09	34299	024 19:51:56	106.09	28039	024 19:37:33	-27.49	2804			
024 21:20:50	33.75	34300	024 21:36:51	79.73	28040	024 21:22:27	-53.84	2805			
024 23:05:43	7.41	34301	024 23:21:46	53.38	28041	024 23:07:21	-80.19	2806			
025 00:50:35	-18.94	34302	025 01:06:41	27.02	28042	025 00:52:15	-106.54	2807			
025 02:35:27	-45.28	34303	025 02:51:36	.67	28043	025 02:37:09	-132.89	2808			
025 04:20:19	-71.62	34304	025 04:36:31	-25.69	28044	025 04:22:03	-159.24	2809			
025 06:05:11	-97.96	34305	025 06:21:27	-52.04	28045	025 06:06:56	174.41	2810			
025 07:50:03	-124.31	34306	025 08:06:22	-78.40	28046	025 07:51:50	148.06	2811			
025 09:34:55	-150.65	34307	025 09:51:17	-104.75	28047	025 09:36:44	121.70	2812			
025 11:19:47	-176.99	34308	025 11:36:12	-131.11	28048	025 11:21:38	95.35	2813			
025 13:04:39	156.66	34309	025 13:21:07	-157.46	28049	025 13:06:32	69.00	2814			
025 14:49:31	130.32	34310	025 15:06:02	176.18	28050	025 14:51:26	42.65	2815			
025 16:34:23	103.98	34311	025 16:50:57	149.82	28051	025 16:36:20	16.30	2816			
025 18:19:15	77.64	34312	025 18:35:52	123.47	28052	025 18:21:14	-10.05	2817			
025 20:04:07	51.29	34313	025 20:20:47	97.11	28053	025 20:06:08	-36.40	2818			
025 21:48:59	24.95	34314	025 22:05:43	70.76	28054	025 21:51:02	-62.75	2819			
025 23:33:51	-1.39	34315	025 23:50:38	44.41	28055	025 23:35:56	-89.10	2820			
026 01:18:43	-27.73	34316	026 01:35:33	18.05	28056	026 01:20:50	-115.45	2821			
026 03:03:35	-54.08	34317	026 03:20:28	-8.31	28057	026 03:05:44	-141.80	2822			
026 04:48:27	-80.42	34318	026 05:05:23	-34.66	28058	026 04:50:38	-168.15	2823			
026 06:33:19	-106.76	34319	026 06:50:18	-61.02	28059	026 06:35:32	165.50	2824			
026 08:18:12	-133.10	34320	026 08:35:13	-87.37	28060	026 08:20:26	139.15	2825			
026 10:03:04	-159.44	34321	026 10:20:08	-113.73	28061	026 10:05:20	112.80	2826			
026 11:47:56	174.21	34322	026 12:05:03	-140.08	28062	026 11:50:14	86.45	2827			
026 13:32:48	147.87	34323	026 13:49:59	-166.44	28063	026 13:35:08	60.10	2828			
026 15:17:40	121.53	34324	026 15:34:54	167.21	28064	026 15:20:02	33.75	2829			
026 17:02:32	95.18	34325	026 17:19:49	140.85	28065	026 17:04:56	7.40	2830			
026 18:47:24	68.84	34326	026 19:04:44	114.50	28066	026 18:49:50	-18.95	2831			
026 20:32:16	42.50	34327	026 20:49:39	88.14	28067	026 20:34:44	-45.30	2832			
026 22:17:08	16.16	34328	026 22:34:34	61.79	28068	026 22:19:38	-71.65	2833			

**SATELLITE S2**

**Ascending Node Predictions**  
**Predicting for 182 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

023 01:39:07	-127.58	26350
023 03:21:09	-153.09	26351
023 05:03:11	-178.59	26352
023 06:45:13	155.90	26353
023 08:27:15	130.39	26354
023 10:09:17	104.88	26355
023 11:51:18	79.39	26356
023 13:33:20	53.88	26357
023 15:15:22	28.38	26358
023 16:57:24	-2.87	26359
023 18:39:26	-22.64	26360
023 20:21:28	-48.15	26361
023 22:03:29	-73.64	26362
023 23:45:31	-99.15	26363

**SATELLITE S3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

023 00:11:01	-70.66	17395
023 01:52:15	-95.97	17396
023 03:33:30	-121.28	17397
023 05:14:44	-146.59	17398
023 06:55:59	-171.90	17399
023 08:37:14	162.78	17400
023 10:18:28	137.48	17401
023 11:59:43	112.16	17402
023 13:40:57	86.86	17403
023 15:22:12	61.54	17404
023 17:03:26	36.24	17405
023 18:44:41	10.92	17406
023 20:25:56	-14.40	17407
023 22:07:10	-39.70	17408
023 23:48:25	-65.02	17409

**SATELLITE S4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

023 00:20:12	-156.15	6848
023 02:02:18	178.33	6849
023 03:44:25	152.79	6850
023 05:26:31	127.27	6851
023 07:08:37	101.75	6852
023 08:50:44	76.21	6853
023 10:32:50	50.69	6854
023 12:14:56	25.17	6855
023 13:57:02	-35	6856
023 15:39:09	-25.89	6857
023 17:21:15	-51.41	6858
023 19:03:21	-76.93	6859
023 20:45:28	-102.46	6860
023 22:27:34	-127.98	6861

024 01:27:33	-124.66	26364
024 03:09:35	-150.16	26365
024 04:51:37	-175.67	26366
024 06:33:38	158.83	26367
024 08:15:40	133.33	26368
024 09:57:42	107.82	26369
024 11:39:44	82.31	26370
024 13:21:46	56.80	26371
024 15:03:48	31.30	26372
024 16:45:49	5.80	26373
024 18:27:51	-19.71	26374
024 20:09:53	-45.21	26375
024 21:51:55	-70.72	26376
024 23:33:57	-96.23	26377

024 01:29:39	-90.32	17410
024 03:10:54	-115.64	17411
024 04:52:09	-140.95	17412
024 06:33:23	-166.26	17413
024 08:14:38	168.43	17414
024 09:55:52	143.12	17415
024 11:37:07	117.81	17416
024 13:18:21	92.50	17417
024 14:59:36	67.19	17418
024 16:40:51	41.87	17419
024 18:22:05	16.57	17420
024 20:03:20	-8.75	17421
024 21:44:34	-34.05	17422
024 23:25:49	-59.37	17423

024 00:09:40	-153.51	6862
024 01:51:47	-179.04	6863
024 03:33:53	155.44	6864
024 05:15:59	129.92	6865
024 06:58:06	104.38	6866
024 08:40:12	78.86	6867
024 10:22:18	53.34	6868
024 12:04:25	27.80	6869
024 13:46:31	2.28	6870
024 15:28:37	-23.24	6871
024 17:10:44	-48.77	6872
024 18:52:50	-74.29	6873
024 20:34:56	-99.82	6874
024 22:17:03	-125.35	6875
024 23:59:09	-150.87	6876

025 01:15:59	-121.74	26378
025 02:58:00	-147.23	26379
025 04:40:02	-172.74	26380
025 06:22:04	161.76	26381
025 08:04:06	136.25	26382
025 09:46:08	110.74	26383
025 11:28:09	85.25	26384
025 13:10:11	59.74	26385
025 14:52:13	34.23	26386
025 16:34:15	8.72	26387
025 18:16:17	-16.78	26388
025 19:58:19	-42.29	26389
025 21:40:20	-67.79	26390
025 23:22:22	-93.29	26391

025 01:07:04	-84.69	17424
025 02:48:18	-109.99	17425
025 04:29:33	-135.31	17426
025 06:10:47	-160.61	17427
025 07:52:02	174.07	17428
025 09:33:17	148.76	17429
025 11:14:31	123.45	17430
025 12:55:46	98.14	17431
025 14:37:00	72.83	17432
025 16:18:15	47.52	17433
025 17:59:29	22.21	17434
025 19:40:44	-3.10	17435
025 21:21:59	-28.92	17436
025 23:03:13	-53.72	17437

025 01:41:15	-176.39	6877
025 03:23:22	158.07	6878
025 05:05:28	132.55	6879
025 06:47:34	107.03	6880
025 08:29:40	81.51	6881
025 10:11:47	55.97	6882
025 11:53:53	30.45	6883
025 13:35:59	4.93	6884
025 15:18:06	-20.60	6885
025 17:00:12	-46.13	6886
025 18:42:18	-71.65	6887
025 20:24:25	-97.18	6888
025 22:06:31	-122.70	6889
025 23:48:37	-148.22	6890

026 01:04:24	-118.80	26392
026 02:46:26	-144.31	26393
026 04:28:28	-169.82	26394
026 06:10:30	164.68	26395
026 07:52:31	139.18	26396
026 09:34:33	113.67	26397
026 11:16:35	88.17	26398
026 12:58:37	62.66	26399
026 14:40:39	37.15	26400
026 16:22:40	11.66	26401
026 18:04:42	-13.85	26402
026 19:46:44	-39.36	26403
026 21:28:46	-64.86	26404
026 23:10:48	-90.37	26405

026 00:44:28	-79.04	17438
026 02:25:42	-104.34	17439
026 04:06:57	-129.66	17440
026 05:48:12	-154.98	17441
026 07:29:26	179.72	17442
026 09:10:41	154.40	17443
026 10:51:55	129.10	17444
026 12:33:10	103.78	17445
026 14:14:25	78.47	17446
026 15:55:39	53.16	17447
026 17:36:54	27.85	17448
026 19:18:08	2.54	17449
026 20:59:23	-22.77	17450
026 22:40:37	-48.08	17451

026 01:30:44	-173.76	6891
026 03:12:50	160.72	6892
026 04:54:56	135.20	6893
026 06:37:03	109.66	6894
026 08:19:09	84.14	6895
026 10:01:15	58.62	6896
026 11:43:22	33.09	6897
026 13:25:28	7.56	6898
026 15:07:34	-17.96	6899
026 16:49:41	-43.49	6900
026 18:31:47	-69.01	6901
026 20:13:53	-94.53	6902
026 21:56:00	-120.07	6903
026 23:38:06	-145.59	6904

SATELLITE C2						SATELLITE C3						SATELLITE C4					
Ascending Node Predictions						Ascending Node Predictions						Ascending Node Predictions					
Predicting for 183 days						Predicting for 183 days						Predicting for 183 days					
TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg		day hr mn sc	deg dg		day hr mn sc	deg dg		day hr mn sc	deg dg		day hr mn sc	deg dg		day hr mn sc	deg dg	
027 00:02:00	-10.19	34329	027 00:19:29	35.43	28069	027 00:04:32	-98.00	2834	027 01:46:52	-36.53	34330	027 02:04:24	9.08	28070	027 01:49:26	-124.35	2835
027 03:31:44	-62.87	34331	027 03:49:20	-17.28	28071	027 03:34:20	-150.71	2836	027 05:16:36	-89.21	34332	027 05:34:15	-43.63	28072	027 05:19:14	-177.06	2837
027 07:01:28	-115.56	34333	027 07:19:10	-69.99	28073	027 07:04:08	156.59	2838	027 08:46:20	-141.90	34334	027 09:04:05	-96.34	28074	027 08:49:02	130.24	2839
027 10:31:12	-168.24	34335	027 10:49:00	-122.70	28075	027 10:33:56	103.89	2840	027 12:16:04	165.42	34336	027 12:33:55	-149.05	28076	027 12:18:50	77.54	2841
027 14:00:56	139.07	34337	027 14:18:50	-175.41	28077	027 14:03:44	51.19	2842	027 15:45:48	112.73	34338	027 16:03:45	158.23	28078	027 15:48:38	24.84	2843
027 17:30:40	86.39	34339	027 17:48:40	131.88	28079	027 17:33:32	-1.51	2844	027 19:15:33	60.05	34340	027 19:33:36	105.53	28080	027 19:18:26	-27.86	2845
027 21:00:25	33.70	34341	027 21:18:31	79.17	28081	027 21:03:20	-54.21	2846	027 22:45:17	7.36	34342	027 23:03:26	52.82	28082	027 22:48:14	-80.56	2847
028 00:30:09	-18.98	34343	028 00:48:21	26.46	28083	028 00:33:08	-106.91	2848	028 02:15:01	-45.32	34344	028 02:33:16	10	28084	028 02:18:02	-133.26	2849
028 03:59:53	-71.67	34345	028 04:18:11	-26.25	28085	028 04:02:56	-159.61	2850	028 05:44:45	-98.01	34346	028 06:03:06	-52.61	28086	028 05:47:50	174.04	2851
028 07:29:37	-124.35	34347	028 07:48:01	-78.96	28087	028 07:32:44	147.69	2852	028 09:14:29	-150.69	34348	028 09:32:56	-105.32	28088	028 09:17:38	121.34	2853
028 10:59:21	-177.04	34349	028 11:17:52	-131.67	28089	028 11:02:32	94.99	2854	028 12:44:13	156.62	34350	028 13:02:47	-158.03	28090	028 12:47:26	68.64	2855
028 14:29:05	130.28	34351	028 14:47:42	175.62	28091	028 14:32:20	42.29	2856	028 16:13:57	103.94	34352	028 16:32:37	149.26	28092	028 16:17:14	15.94	2857
028 17:58:49	77.59	34353	028 18:17:32	122.91	28093	028 18:02:08	-10.41	2858	028 19:43:41	51.25	34354	028 20:02:27	96.55	28094	028 19:47:02	-36.76	2859
028 21:28:33	24.91	34355	028 21:47:22	70.20	28095	028 21:31:56	-63.11	2860	028 23:13:25	-1.44	34356	028 23:32:17	43.84	28096	028 23:16:50	-89.47	2861
029 00:58:17	-27.78	34357	029 01:17:13	17.49	28097	029 01:01:44	-115.82	2862	029 02:43:09	-54.12	34358	029 03:02:08	-8.87	28098	029 02:46:38	-142.17	2863
029 04:28:02	-80.46	34359	029 04:47:03	-35.22	28099	029 04:31:32	-168.52	2864	029 06:12:54	-106.80	34360	029 06:31:58	-61.58	28100	029 06:16:26	165.13	2865
029 07:57:46	-133.15	34361	029 08:16:53	-87.93	28101	029 08:01:20	138.78	2866	029 09:42:38	-159.49	34362	029 10:01:48	-114.29	28102	029 09:46:14	112.43	2867
029 11:27:30	174.17	34363	029 11:46:43	-140.65	28103	029 11:31:08	86.08	2868	029 13:12:22	147.83	34364	029 13:31:38	-167.00	28104	029 13:16:02	59.73	2869
029 14:57:14	121.48	34365	029 15:16:33	166.64	28105	029 15:00:56	33.38	2870	029 16:42:06	95.14	34366	029 17:01:29	140.29	28106	029 16:45:50	7.03	2871
029 18:26:58	68.80	34367	029 18:46:24	113.94	28107	029 18:30:44	-19.32	2872	029 20:11:50	42.46	34368	029 20:31:19	87.58	28108	029 20:15:38	-45.67	2873
029 21:56:42	16.11	34369	029 22:16:14	61.22	28109	029 22:00:32	-72.02	2874	029 23:41:34	-10.23	34370	029 23:45:26	-98.37	2875			
030 01:26:26	-36.57	34371	030 00:01:09	34.87	28110	030 01:30:20	-124.72	2876	030 03:11:18	-62.92	34372	030 01:46:04	8.51	28111	030 03:15:14	-151.07	2877
030 04:56:10	-89.26	34373	030 03:30:59	-17.84	28112	030 05:00:08	-177.42	2878	030 06:41:02	-115.60	34374	030 05:15:54	-44.20	28113	030 06:45:02	156.23	2879
030 08:25:54	-141.94	34375	030 07:00:49	-70.55	28114	030 08:29:56	129.88	2880	030 10:10:46	-168.29	34376	030 08:45:45	-96.91	28115	030 10:14:50	103.53	2881
030 11:55:38	165.37	34377	030 10:30:40	-123.26	28116	030 11:59:44	77.18	2882	030 13:40:30	139.03	34378	030 12:15:35	-149.62	28117	030 13:44:38	50.83	2883
030 15:25:23	112.69	34379	030 14:00:39	-175.97	28118	030 15:29:32	24.48	2884	030 17:10:15	86.35	34380	030 15:45:25	157.67	28119	030 17:14:26	-1.87	2885
030 18:55:07	60.00	34381	030 17:30:20	131.32	28120	030 18:59:20	-28.22	2886	030 20:39:59	33.66	34382	030 19:15:15	104.96	28121	030 20:44:14	-54.57	2887
030 22:24:51	7.32	34383	030 21:00:10	78.61	28122	030 22:29:08	-80.93	2888				030 22:45:06	52.25	28123			

West longitude is negative (-)

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT	
day hr mn sc	deg dg			day hr mn sc	deg dg			day hr mn sc	deg dg		
027 00:52:50	-115.88	26406		027 00:21:52	-73.39	17452		027 01:20:12	-171.11	6905	
027 02:34:51	-141.37	26407		027 02:03:07	-98.71	17453		027 03:02:19	163.35	6906	
027 04:16:53	-166.88	26408		027 03:44:21	-124.01	17454		027 04:44:25	137.83	6907	
027 05:58:55	167.61	26409		027 05:25:36	-149.33	17455		027 06:26:31	112.31	6908	
027 07:40:57	142.10	26410		027 07:06:50	-174.63	17456		027 08:08:37	86.79	6909	
027 09:22:59	116.60	26411		027 08:48:05	160.05	17457		027 09:50:44	61.25	6910	
027 11:05:01	91.09	26412		027 10:29:20	134.73	17458		027 11:32:50	35.73	6911	
027 12:47:02	65.59	26413		027 12:10:34	109.43	17459		027 13:14:56	10.21	6912	
027 14:29:04	40.09	26414		027 13:51:49	84.11	17460		027 14:57:03	-15.32	6913	
027 16:11:06	14.58	26415		027 15:33:03	58.81	17461		027 16:39:09	-40.84	6914	
027 17:53:08	-10.93	26416		027 17:14:18	33.49	17462		027 18:21:15	-66.37	6915	
027 19:35:10	-36.44	26417		027 18:55:33	8.18	17463		027 20:03:22	-91.90	6916	
027 21:17:12	-61.94	26418		027 20:36:47	-17.13	17464		027 21:45:28	-117.42	6917	
027 22:59:13	-87.44	26419		027 22:18:02	-42.44	17465		027 23:27:34	-142.94	6918	
027 23:59:16				027 23:59:16	-67.75	17466					
028 00:41:15	-112.95	26420		028 01:40:31	-93.06	17467		028 01:09:41	-168.48	6919	
028 02:23:17	-138.45	26421		028 03:21:45	-118.37	17468		028 02:51:47	166.00	6920	
028 04:05:19	-163.96	26422		028 05:03:00	-143.68	17469		028 04:33:53	140.48	6921	
028 05:47:21	170.53	26423		028 06:44:15	-169.00	17470		028 06:16:00	114.94	6922	
028 07:29:22	145.04	26424		028 08:25:29	165.70	17471		028 07:58:06	89.42	6923	
028 09:11:24	119.53	26425		028 10:06:44	140.38	17472		028 09:40:12	63.90	6924	
028 10:53:26	94.02	26426		028 11:47:58	115.08	17473		028 11:22:19	38.37	6925	
028 12:35:28	68.52	26427		028 13:29:13	89.76	17474		028 13:04:25	12.85	6926	
028 14:17:30	43.01	26428		028 15:10:28	64.44	17475		028 14:46:31	-12.68	6927	
028 15:59:32	17.50	26429		028 16:51:42	39.14	17476		028 16:28:38	-38.21	6928	
028 17:41:33	-7.99	26430		028 18:32:57	13.82	17477		028 18:10:44	-63.73	6929	
028 19:23:35	-33.50	26431		028 20:14:11	-11.48	17478		028 19:52:50	-89.25	6930	
028 21:05:37	-59.01	26432		028 21:55:26	-36.80	17479		028 21:34:57	-114.79	6931	
028 22:47:39	-84.52	26433		028 23:36:41	-62.11	17480		028 23:17:03	-140.31	6932	
029 00:29:41	-110.02	26434		029 01:17:55	-87.42	17481		029 00:59:09	-165.83	6933	
029 02:11:43	-135.53	26435		029 02:59:10	-112.73	17482		029 02:41:16	168.63	6934	
029 03:53:44	-161.03	26436		029 04:40:24	-138.04	17483		029 04:23:22	143.11	6935	
029 05:35:46	173.47	26437		029 06:21:39	-163.35	17484		029 06:05:28	117.59	6936	
029 07:17:48	147.96	26438		029 08:02:54	171.33	17485		029 07:47:34	92.07	6937	
029 08:59:50	122.45	26439		029 09:44:08	146.03	17486		029 09:29:41	66.54	6938	
029 10:41:52	96.94	26440		029 11:25:23	120.71	17487		029 11:11:47	41.01	6939	
029 12:23:53	71.45	26441		029 13:06:37	95.91	17488		029 12:53:53	15.49	6940	
029 14:05:55	45.94	26442		029 14:47:52	70.09	17489		029 14:36:00	-10.04	6941	
029 15:47:57	20.43	26443		029 16:29:06	44.79	17490		029 16:18:06	-35.56	6942	
029 17:29:59	-5.07	26444		029 18:10:21	19.47	17491		029 18:00:12	-61.08	6943	
029 19:12:01	-30.58	26445		029 19:51:36	-5.85	17492		029 19:42:19	-86.62	6944	
029 20:54:03	-56.09	26446		029 21:32:50	-31.15	17493		029 21:24:25	-112.14	6945	
029 22:36:04	-81.58	26447		029 23:14:05	-56.47	17494		029 23:06:31	-137.66	6946	
030 00:18:06	-107.09	26448		030 00:55:19	-81.77	17495		030 00:48:38	-163.20	6947	
030 02:00:08	-132.60	26449		030 02:36:34	-107.09	17496		030 02:30:44	171.28	6948	
030 03:42:10	-158.10	26450		030 04:17:49	-132.40	17497		030 04:12:50	145.76	6949	
030 05:24:12	176.39	26451		030 05:59:03	-157.71	17498		030 05:54:57	120.23	6950	
030 07:06:14	150.88	26452		030 07:40:18	176.98	17499		030 07:37:03	94.70	6951	
030 08:48:15	125.39	26453		030 09:21:32	151.67	17500		030 09:19:09	69.18	6952	
030 10:30:17	99.88	26454		030 11:02:47	126.36	17501		030 11:01:16	43.65	6953	
030 12:12:19	74.37	26455		030 12:44:02	101.04	17502		030 12:43:22	18.13	6954	
030 13:54:21	48.86	26456		030 14:25:16	75.74	17503		030 14:25:28	-7.39	6955	
030 15:36:23	23.36	26457		030 16:06:31	50.42	17504		030 16:07:35	-32.93	6956	
030 17:18:24	-2.14	26458		030 17:47:45	25.12	17505		030 17:49:41	-58.45	6957	
030 19:00:26	-27.65	26459		030 19:29:00	-20	17506		030 19:31:47	-83.97	6958	
030 20:42:28	-53.15	26460		030 21:10:14	-25.50	17507		030 21:13:54	-109.51	6959	
030 22:24:30	-78.66	26461		030 22:51:29	-50.82	17508		030 22:56:00	-135.03	6960	

**SATELLITE C2**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

031 00:09:43	-19.02	34384
031 01:54:35	-45.37	34385
031 03:39:27	-71.71	34386
031 05:24:19	-98.05	34387
031 07:09:11	-124.39	34388
031 08:54:03	-150.74	34389
031 10:38:55	-177.08	34390
031 12:23:47	-156.58	34391
031 14:08:39	130.23	34392
031 15:53:31	103.89	34393
031 17:38:23	77.55	34394
031 19:23:15	51.21	34395
031 21:08:07	24.86	34396
031 22:52:59	-1.48	34397

**SATELLITE C3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

031 00:30:01	25.90	28124
031 02:14:56	-46	28125
031 03:59:51	-26.81	28126
031 05:44:46	-53.17	28127
031 07:29:41	-79.52	28128
031 09:14:36	-105.88	28129
031 10:59:31	-132.24	28130
031 12:44:26	-158.59	28131
031 14:29:22	175.06	28132
031 16:14:17	148.70	28133
031 17:59:12	122.35	28134
031 19:44:07	95.99	28135
031 21:29:02	69.63	28136
031 23:13:57	43.28	28137

**SATELLITE C4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

031 00:14:02	-107.28	2889
031 01:58:56	-133.63	2890
031 03:43:50	-159.98	2891
031 05:28:44	173.67	2892
031 07:13:38	147.32	2893
031 08:58:32	120.97	2894
031 10:43:26	94.62	2895
031 12:28:20	68.27	2896
031 14:13:14	41.92	2897
031 15:58:08	15.57	2898
031 17:43:02	-10.78	2899
031 19:27:56	-37.13	2900
031 21:12:50	-63.48	2901
031 22:57:44	-89.83	2902

032 00:37:51	-27.82	34398
032 02:22:44	-54.16	34399
032 04:07:36	-80.50	34400
032 05:52:28	-106.85	34401
032 07:37:20	-133.19	34402
032 09:22:12	-159.53	34403
032 11:07:04	174.13	34404
032 12:51:56	147.78	34405
032 14:36:48	121.44	34406
032 16:21:40	95.10	34407
032 18:06:32	68.75	34408
032 19:51:24	42.41	34409
032 21:36:16	16.07	34410
032 23:21:08	-10.27	34411

032 00:58:52	16.92	28138
032 02:43:47	-9.43	28139
032 04:28:43	-35.78	28140
032 06:13:38	-62.14	28141
032 07:58:33	-88.50	28142
032 09:43:28	-114.85	28143
032 11:28:23	-141.21	28144
032 13:13:18	-167.56	28145
032 14:58:13	166.08	28146
032 16:43:08	139.73	28147
032 18:28:03	113.37	28148
032 20:12:59	87.02	28149
032 21:57:54	60.66	28150
032 23:42:49	34.31	28151

032 00:42:37	-116.18	2903
032 02:27:31	-142.53	2904
032 04:12:25	-168.88	2905
032 05:57:19	164.77	2906
032 07:42:13	138.41	2907
032 09:27:07	112.06	2908
032 11:12:01	85.71	2909
032 12:56:55	59.36	2910
032 14:41:49	33.01	2911
032 16:26:43	6.66	2912
032 18:11:37	-19.69	2913
032 19:56:31	-46.04	2914
032 21:41:25	-72.39	2915
032 23:26:19	-98.74	2916

033 01:06:00	-36.62	34412
033 02:50:52	-62.96	34413
033 04:35:44	-89.30	34414
033 06:20:36	-115.64	34415
033 08:05:28	-141.99	34416
033 09:50:20	-168.33	34417
033 11:35:12	165.33	34418
033 13:20:05	138.99	34419
033 15:04:57	112.65	34420
033 16:49:49	86.30	34421
033 18:34:41	59.96	34422
033 20:19:33	33.62	34423
033 22:04:25	7.28	34424
033 23:49:17	-19.07	34425

033 01:27:44	7.95	28152
033 03:12:39	-18.40	28153
033 04:57:34	-44.76	28154
033 06:42:29	-71.11	28155
033 08:27:24	-97.47	28156
033 10:12:20	-123.82	28157
033 11:57:15	-150.18	28158
033 13:42:10	-176.53	28159
033 15:27:05	157.11	28160
033 17:12:00	130.76	28161
033 18:56:55	104.40	28162
033 20:41:50	78.04	28163
033 22:26:45	51.69	28164

033 01:11:13	-125.09	2917
033 02:56:07	-151.44	2918
033 04:41:01	-177.79	2919
033 06:25:55	155.86	2920
033 08:10:49	129.51	2921
033 09:55:43	103.16	2922
033 11:40:37	76.81	2923
033 13:25:31	50.46	2924
033 15:10:25	24.11	2925
033 16:55:19	-2.24	2926
033 18:40:13	-28.59	2927
033 20:25:07	-54.94	2928
033 22:10:01	-81.29	2929
033 23:54:55	-107.64	2930

034 01:34:09	-45.41	34426
034 03:19:01	-71.75	34427
034 05:03:53	-98.10	34428
034 06:48:45	-124.44	34429
034 08:33:37	-150.78	34430
034 10:18:29	-177.12	34431
034 12:03:21	156.53	34432
034 13:48:13	130.19	34433
034 15:33:05	103.85	34434
034 17:17:57	77.51	34435
034 19:02:49	51.16	34436
034 20:47:41	24.82	34437
034 22:32:33	-1.52	34438

034 00:11:40	25.33	28165
034 01:56:36	-1.02	28166
034 03:41:31	-27.38	28167
034 05:26:26	-53.73	28168
034 07:11:21	-80.09	28169
034 08:56:16	-106.44	28170
034 10:41:11	-132.80	28171
034 12:26:06	-159.15	28172
034 14:11:01	174.49	28173
034 15:55:56	148.14	28174
034 17:40:52	121.78	28175
034 19:25:47	95.43	28176
034 21:10:42	69.07	28177
034 22:55:37	42.72	28178

034 01:39:49	-133.99	2931
034 03:24:43	-160.34	2932
034 05:09:37	173.31	2933
034 06:54:31	146.96	2934
034 08:39:25	120.60	2935
034 10:24:19	94.25	2936
034 12:09:13	67.90	2937
034 13:54:07	41.55	2938
034 15:39:01	15.20	2939
034 17:23:55	-11.15	2940
034 19:08:49	-37.50	2941
034 20:53:43	-63.85	2942
034 22:38:37	-90.20	2943

**SATELLITE S2**

**Ascending Node Predictions**  
**Predicting for 182 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

031 00:06:32	-104.17	26462
031 01:48:34	-129.68	26463
031 03:30:35	-155.17	26464
031 05:12:37	179.32	26465
031 06:54:39	153.81	26466
031 08:36:41	128.31	26467
031 10:18:43	102.80	26468
031 12:00:44	77.31	26469
031 13:42:46	51.80	26470
031 15:24:48	26.29	26471
031 17:06:50	.78	26472
031 18:48:52	-24.73	26473
031 20:30:54	-50.23	26474
031 22:12:55	-75.73	26475
031 23:54:57	-101.23	26476

**SATELLITE S3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

031 00:32:44	-76.14	17509
031 02:13:58	-101.44	17510
031 03:55:13	-126.76	17511
031 05:36:27	-152.06	17512
031 07:17:42	-177.38	17513
031 08:58:57	157.31	17514
031 10:40:11	132.00	17515
031 12:21:26	106.69	17516
031 14:02:40	81.38	17517
031 15:43:55	56.07	17518
031 17:25:10	30.75	17519
031 19:06:24	5.45	17520
031 20:47:39	-19.87	17521
031 22:28:53	-45.17	17522

**SATELLITE S4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

031 00:38:06	-160.55	6961
031 02:20:13	173.92	6962
031 04:02:19	148.39	6963
031 05:44:25	122.87	6964
031 07:26:32	97.34	6965
031 09:08:38	71.82	6966
031 10:50:44	46.30	6967
031 12:32:50	20.77	6968
031 14:14:57	-4.76	6969
031 15:57:03	-30.28	6970
031 17:39:09	-55.80	6971
031 19:21:16	-81.34	6972
031 21:03:22	-106.86	6973
031 22:45:28	-132.38	6974

032 01:36:59	-126.74	26477
032 03:19:01	-152.25	26478
032 05:01:03	-177.76	26479
032 06:43:05	156.74	26480
032 08:25:06	131.24	26481
032 10:07:08	105.73	26482
032 11:49:10	80.23	26483
032 13:31:12	54.72	26484
032 15:13:14	29.21	26485
032 16:55:15	3.72	26486
032 18:37:17	-21.79	26487
032 20:19:19	-47.30	26488
032 22:01:21	-72.81	26489
032 23:43:23	-98.31	26490

032 00:10:08	-70.49	17523
032 01:51:23	-95.81	17524
032 03:32:37	-121.11	17525
032 05:13:52	-146.43	17526
032 06:55:06	-171.73	17527
032 08:36:21	162.95	17528
032 10:17:35	137.65	17529
032 11:58:50	112.33	17530
032 13:40:05	87.02	17531
032 15:21:19	61.71	17532
032 17:02:34	36.40	17533
032 18:43:48	11.09	17534
032 20:25:03	-14.22	17535
032 22:06:18	-39.54	17536
032 23:47:32	-64.84	17537

032 00:27:35	-157.91	6975
032 02:09:41	176.56	6976
032 03:51:47	151.04	6977
032 05:33:54	125.51	6978
032 07:16:00	99.99	6979
032 08:58:06	74.47	6980
032 10:40:13	48.93	6981
032 12:22:19	23.41	6982
032 14:04:25	-2.11	6983
032 15:46:32	-27.65	6984
032 17:28:38	-53.17	6985
032 19:10:44	-78.69	6986
032 20:52:51	-104.22	6987
032 22:34:57	-129.75	6988

033 01:25:25	-123.82	26491
033 03:07:26	-149.32	26492
033 04:49:28	-174.82	26493
033 06:31:30	159.67	26494
033 08:13:32	134.16	26495
033 09:55:34	108.65	26496
033 11:37:36	83.15	26497
033 13:19:37	57.65	26498
033 15:01:39	32.15	26499
033 16:43:41	6.64	26500
033 18:25:43	-18.87	26501
033 20:07:45	-44.38	26502
033 21:49:46	-69.87	26503
033 23:31:48	-95.38	26504

033 01:28:47	-90.16	17538
033 03:10:01	-115.46	17539
033 04:51:16	-140.78	17540
033 06:32:31	-166.10	17541
033 08:13:45	168.60	17542
033 09:55:00	143.28	17543
033 11:36:14	117.98	17544
033 13:17:29	92.66	17545
033 14:58:43	67.36	17546
033 16:39:58	42.04	17547
033 18:21:13	16.73	17548
033 20:02:27	-8.58	17549
033 21:43:42	-33.89	17550
033 23:24:56	-59.20	17551

033 00:17:03	-155.27	6989
033 01:59:10	179.20	6990
033 03:41:16	153.68	6991
033 05:23:22	128.16	6992
033 07:05:29	102.62	6993
033 08:47:35	77.10	6994
033 10:29:41	51.58	6995
033 12:11:48	26.04	6996
033 13:53:54	5.52	6997
033 15:36:00	-25.00	6998
033 17:18:07	-50.53	6999
033 19:00:13	-76.06	7000
033 20:42:19	-101.58	7001
033 22:24:25	-127.10	7002

034 01:13:50	-120.89	26505
034 02:55:52	-146.39	26506
034 04:37:54	-171.90	26507
034 06:19:56	162.59	26508
034 08:01:57	137.10	26509
034 09:43:59	111.59	26510
034 11:26:01	86.08	26511
034 13:08:03	60.57	26512
034 14:50:05	35.07	26513
034 16:32:07	9.56	26514
034 18:14:08	-15.94	26515
034 19:56:10	-41.44	26516
034 21:38:12	-66.95	26517
034 23:20:14	-92.46	26518

034 01:06:11	-84.51	17552
034 02:47:26	-109.83	17553
034 04:28:40	-135.13	17554
034 06:09:55	-160.45	17555
034 07:51:09	174.25	17556
034 09:32:24	148.93	17557
034 11:13:39	123.61	17558
034 12:54:53	98.31	17559
034 14:36:08	72.99	17560
034 16:17:22	47.69	17561
034 17:58:37	22.37	17562
034 19:39:52	-2.94	17563
034 21:21:06	-28.25	17564
034 23:02:21	-53.56	17565

034 00:06:32	-152.63	7003
034 01:48:38	-178.15	7004
034 03:30:44	156.32	7005
034 05:12:51	130.79	7006
034 06:54:57	105.27	7007
034 08:37:03	79.75	7008
034 10:19:10	54.21	7009
034 12:01:16	28.69	7010
034 13:43:22	3.17	7011
034 15:25:29	-22.37	7012
034 17:07:35	-47.89	7013
034 18:49:41	-73.41	7014
034 20:31:48	-98.94	7015
034 22:13:54	-124.46	7016
034 23:56:00	-149.99	7017

SATELLITE C2							SATELLITE C3							SATELLITE C4						
Ascending Node Predictions							Ascending Node Predictions							Ascending Node Predictions						
Predicting for 183 days							Predicting for 183 days							Predicting for 183 days						
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	
day	hr	mn	sc	day	hr	mn	sc	day	hr	mn	sc	day	hr	mn	sc	day	hr	mn	sc	
deg	dg			deg	dg			deg	dg			deg	dg			deg	dg			
035 00:17:26	-27.86	34439		035 00:40:32	16.36	28179		035 00:23:31	-116.55	2944										
035 02:02:18	-54.20	34440		035 02:25:27	-9.99	28180		035 02:08:25	-142.90	2945										
035 03:47:10	-80.55	34441		035 04:10:22	-36.35	28181		035 03:53:19	-169.25	2946										
035 05:32:02	-106.89	34442		035 05:55:17	-62.71	28182		035 05:38:13	164.40	2947										
035 07:16:54	-133.23	34443		035 07:40:13	-89.06	28183		035 07:23:07	138.05	2948										
035 09:01:46	-159.58	34444		035 09:25:08	-115.41	28184		035 09:08:01	111.70	2949										
035 10:46:38	174.08	34445		035 11:10:03	-141.77	28185		035 10:52:55	85.35	2950										
035 12:31:30	147.74	34446		035 12:54:58	-168.12	28186		035 12:37:49	59.00	2951										
035 14:16:22	121.40	34447		035 14:39:53	165.52	28187		035 14:22:43	32.65	2952										
035 16:01:14	95.05	34448		035 16:24:48	139.16	28188		035 16:07:37	6.30	2953										
035 17:46:06	68.71	34449		035 18:09:43	112.81	28189		035 17:52:31	-20.05	2954										
035 19:30:58	42.37	34450		035 19:54:38	86.45	28190		035 19:37:25	-46.40	2955										
035 21:15:50	16.03	34451		035 21:39:33	60.10	28191		035 21:22:19	-72.75	2956										
035 23:00:42	-10.32	34452		035 23:24:29	33.75	28192		035 23:07:13	-99.10	2957										
036 00:45:34	-36.66	34453		036 01:09:24	7.39	28193		036 00:52:07	-125.45	2958										
036 02:30:26	-63.00	34454		036 02:54:19	-18.97	28194		036 02:37:01	-151.80	2959										
036 04:15:18	-89.34	34455		036 04:39:14	-45.32	28195		036 04:21:55	-178.15	2960										
036 06:00:10	-115.69	34456		036 06:24:09	-71.68	28196		036 06:06:49	155.50	2961										
036 07:45:02	-142.03	34457		036 08:09:04	-98.03	28197		036 07:51:42	129.14	2962										
036 09:29:54	-168.37	34458		036 09:53:59	-124.39	28198		036 09:36:36	102.79	2963										
036 11:14:46	165.29	34459		036 11:38:54	-150.74	28199		036 11:21:30	76.44	2964										
036 12:59:39	138.95	34460		036 13:23:50	-177.10	28200		036 13:06:24	50.09	2965										
036 14:44:31	112.60	34461		036 15:08:45	156.55	28201		036 14:51:18	23.74	2966										
036 16:29:23	86.26	34462		036 16:53:40	130.19	28202		036 16:36:12	-2.61	2967										
036 18:14:15	59.92	34463		036 18:38:35	103.84	28203		036 18:21:06	-28.96	2968										
036 19:59:07	33.57	34464		036 20:23:30	77.48	28204		036 20:06:00	-55.31	2969										
036 21:43:59	7.23	34465		036 22:08:25	51.13	28205		036 21:50:54	-81.66	2970										
036 23:28:51	-19.11	34466		036 23:53:20	24.77	28206		036 23:35:48	-108.01	2971										
037 01:13:43	-45.45	34467		037 01:38:15	-1.58	28207		037 01:20:42	-134.36	2972										
037 02:58:35	-71.80	34468		037 03:23:11	-27.94	28208		037 03:05:36	-160.71	2973										
037 04:43:27	-98.14	34469		037 05:08:06	-54.29	28209		037 04:50:30	172.94	2974										
037 06:28:19	-124.48	34470		037 06:53:01	-80.65	28210		037 06:35:24	146.59	2975										
037 08:13:11	-150.82	34471		037 08:37:56	-107.00	28211		037 08:20:18	120.24	2976										
037 09:58:03	-177.17	34472		037 10:22:51	-133.36	28212		037 10:05:12	93.89	2977										
037 11:42:55	156.49	34473		037 12:07:46	-159.72	28213		037 11:50:06	67.54	2978										
037 13:27:47	130.15	34474		037 13:52:41	173.93	28214		037 13:35:00	41.19	2979										
037 15:12:39	103.81	34475		037 15:37:36	147.57	28215		037 15:19:54	14.84	2980										
037 16:57:31	77.46	34476		037 17:22:31	121.22	28216		037 17:04:48	-11.51	2981										
037 18:42:23	51.12	34477		037 19:07:27	94.87	28217		037 18:49:42	-37.86	2982										
037 20:27:15	24.78	34478		037 20:52:22	68.51	28218		037 20:34:36	-64.21	2983										
037 22:12:07	-1.56	34479		037 22:37:17	42.15	28219		037 22:19:30	-90.56	2984										
037 23:56:59	-27.91	34480																		
038 01:41:52	-54.25	34481		038 00:22:12	15.80	28220		038 00:04:24	-116.91	2985										
038 03:26:44	-80.59	34482		038 02:07:07	-10.56	28221		038 01:49:18	-143.26	2986										
038 05:11:36	-106.93	34483		038 03:52:02	-36.91	28222		038 03:34:12	-169.62	2987										
038 06:56:28	-133.28	34484		038 05:36:57	-63.27	28223		038 05:19:06	164.03	2988										
038 08:41:20	-159.62	34485		038 07:21:52	-89.62	28224		038 07:04:00	137.68	2989										
038 10:26:12	174.04	34486		038 09:06:48	-115.98	28225		038 08:48:54	111.33	2990										
038 12:11:04	147.70	34487		038 10:51:43	-142.33	28226		038 10:33:48	84.98	2991										
038 13:55:56	121.35	34488		038 12:36:38	-168.69	28227		038 12:18:42	58.63	2992										
038 15:40:48	95.01	34489		038 14:21:33	164.96	28228		038 14:03:36	32.28	2993										
038 17:25:40	68.67	34490		038 16:06:28	138.60	28229		038 15:48:30	5.93	2994										
038 19:10:32	42.33	34491		038 17:51:23	112.25	28230		038 17:33:24	-20.42	2995										
038 20:55:24	15.98	34492		038 19:36:18	85.89	28231		038 19:18:18	-46.77	2996										
038 22:40:16	-10.36	34493		038 21:21:13	59.54	28232		038 21:03:12	-73.12	2997										
				038 23:06:08	33.18	28233		038 22:48:06	-99.47	2998										

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	day	hr mn sc	deg dg
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg
035 01:02:16	-117.97	26519	035 00:43:35	-78.87	17566	035 01:38:07	-175.52	7018			
035 02:44:17	-143.46	26520	035 02:24:50	-104.18	17567	035 03:20:13	158.96	7019			
035 04:26:19	-168.97	26521	035 04:06:04	-129.49	17568	035 05:02:19	133.44	7020			
035 06:08:21	165.52	26522	035 05:47:19	-154.80	17569	035 06:44:26	107.90	7021			
035 07:50:23	140.02	26523	035 07:28:34	179.88	17570	035 08:26:32	82.38	7022			
035 09:32:25	114.51	26524	035 09:09:48	154.58	17571	035 10:08:38	56.86	7023			
035 11:14:27	89.00	26525	035 10:51:03	129.26	17572	035 11:50:45	31.33	7024			
035 12:56:28	63.51	26526	035 12:32:17	103.96	17573	035 13:32:51	5.80	7025			
035 14:38:30	38.00	26527	035 14:13:32	78.64	17574	035 15:14:57	-19.72	7026			
035 16:20:32	12.49	26528	035 15:54:47	53.32	17575	035 16:57:04	-45.25	7027			
035 18:02:34	-13.02	26529	035 17:36:01	28.02	17576	035 18:39:10	-70.77	7028			
035 19:44:36	-38.52	26530	035 19:17:16	2.70	17577	035 20:21:16	-96.29	7029			
035 21:26:37	-64.02	26531	035 20:58:30	-22.60	17578	035 22:03:23	-121.83	7030			
035 23:08:39	-89.52	26532	035 22:39:45	-47.92	17579	035 23:45:29	-147.35	7031			
036 00:50:41	-115.03	26533	036 00:21:00	-73.23	17580	036 01:27:35	-172.87	7032			
036 02:32:43	-140.54	26534	036 02:02:14	-98.54	17581	036 03:09:42	161.59	7033			
036 04:14:45	-166.05	26535	036 03:43:29	-123.85	17582	036 04:51:48	136.07	7034			
036 05:56:47	168.45	26536	036 05:24:43	-149.16	17583	036 06:33:54	110.55	7035			
036 07:38:48	142.95	26537	036 07:05:58	-174.47	17584	036 08:16:01	85.02	7036			
036 09:20:50	117.44	26538	036 08:47:13	160.21	17585	036 09:58:07	59.49	7037			
036 11:02:52	91.94	26539	036 10:28:27	134.91	17586	036 11:40:13	33.97	7038			
036 12:44:54	66.43	26540	036 12:09:42	109.59	17587	036 13:22:19	8.45	7039			
036 14:26:56	40.92	26541	036 13:50:56	84.29	17588	036 15:04:26	-17.08	7040			
036 16:08:58	15.41	26542	036 15:32:11	58.97	17589	036 16:46:32	-42.60	7041			
036 17:50:59	-10.08	26543	036 17:13:26	33.66	17590	036 18:28:38	-68.13	7042			
036 19:33:01	-35.59	26544	036 18:54:40	8.35	17591	036 20:10:45	-93.66	7043			
036 21:15:03	-61.10	26545	036 20:35:55	-16.96	17592	036 21:52:51	-119.18	7044			
036 22:57:05	-86.60	26546	036 22:17:09	-42.27	17593	036 23:34:57	-144.70	7045			
036 23:58:24			036 23:58:24	-67.58	17594						
037 00:39:07	-112.11	26547	037 01:39:38	-92.89	17595	037 01:17:04	-170.24	7046			
037 02:21:08	-137.61	26548	037 03:20:53	-118.20	17596	037 02:59:10	164.24	7047			
037 04:03:10	-163.11	26549	037 05:02:08	-143.52	17597	037 04:41:16	138.72	7048			
037 05:45:12	171.38	26550	037 06:43:22	-168.82	17598	037 06:23:23	113.18	7049			
037 07:27:14	145.87	26551	037 08:24:37	165.86	17599	037 08:05:29	87.66	7050			
037 09:09:16	120.36	26552	037 10:05:51	140.56	17600	037 09:47:35	62.14	7051			
037 10:51:18	94.86	26553	037 11:47:06	115.24	17601	037 11:29:42	36.61	7052			
037 12:33:19	69.36	26554	037 13:28:21	89.92	17602	037 13:11:48	11.09	7053			
037 14:15:21	43.86	26555	037 15:09:35	64.62	17603	037 14:53:54	-14.44	7054			
037 15:57:23	18.35	26556	037 16:50:50	39.30	17604	037 16:36:01	-39.97	7055			
037 17:39:25	-7.16	26557	037 18:32:04	14.00	17605	037 18:18:07	-65.49	7056			
037 19:21:27	-32.67	26558	037 20:13:19	-11.32	17606	037 20:00:13	-91.01	7057			
037 21:03:28	-58.16	26559	037 21:54:34	-36.63	17607	037 21:42:20	-116.55	7058			
037 22:45:30	-83.67	26560	037 23:35:48	-61.94	17608	037 23:24:26	-142.07	7059			
038 00:27:32	-109.18	26561	038 01:17:03	-87.25	17609	038 01:06:32	-167.59	7060			
038 02:09:34	-134.68	26562	038 02:58:17	-112.56	17610	038 02:48:39	166.88	7061			
038 03:51:36	-160.19	26563	038 04:39:32	-137.87	17611	038 04:30:45	141.35	7062			
038 05:33:38	174.30	26564	038 06:20:47	-163.19	17612	038 06:12:51	115.83	7063			
038 07:15:39	148.81	26565	038 08:02:01	171.51	17613	038 07:54:58	90.30	7064			
038 08:57:41	123.30	26566	038 09:43:16	146.19	17614	038 09:37:04	64.78	7065			
038 10:39:43	97.79	26567	038 11:24:30	120.89	17615	038 11:19:10	39.26	7066			
038 12:21:45	72.28	26568	038 13:05:45	95.57	17616	038 13:01:17	13.72	7067			
038 14:03:47	46.78	26569	038 14:47:00	70.25	17617	038 14:43:23	-11.80	7068			
038 15:45:49	21.27	26570	038 16:28:14	44.95	17618	038 16:25:29	-37.32	7069			
038 17:27:50	-4.23	26571	038 18:09:29	19.63	17619	038 18:07:36	-62.86	7070			
038 19:09:52	-29.73	26572	038 19:50:43	-5.67	17620	038 19:49:42	-88.38	7071			
038 20:51:54	-55.24	26573	038 21:31:58	-30.99	17621	038 21:31:48	-113.90	7072			
038 22:33:56	-80.75	26574	038 23:13:12	-56.29	17622	038 23:13:55	-139.43	7073			

**SATELLITE C2****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

039 00:25:08	-36.70	34494
039 02:10:00	-63.04	34495
039 03:54:52	-89.39	34496
039 05:39:44	-115.73	34497
039 07:24:36	-142.07	34498
039 09:09:28	-168.41	34499
039 10:54:20	165.24	34500
039 12:39:12	138.90	34501
039 14:24:04	112.56	34502
039 16:08:57	86.22	34503
039 17:53:49	59.88	34504
039 19:38:41	33.53	34505
039 21:23:33	7.19	34506
039 23:08:25	-19.15	34507

**SATELLITE C3****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

039 00:51:04	6.83	28234
039 02:35:59	-19.53	28235
039 04:20:54	-45.88	28236
039 06:05:49	-72.24	28237
039 07:50:44	-98.60	28238
039 09:35:39	-124.95	28239
039 11:20:34	-151.31	28240
039 13:05:29	-177.66	28241
039 14:50:25	155.99	28242
039 16:35:20	129.63	28243
039 18:20:15	103.27	28244
039 20:05:10	76.92	28245
039 21:50:05	50.56	28246
039 23:35:00	24.21	28247

**SATELLITE C4****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

039 00:33:00	-125.82	2999
039 02:17:54	-152.17	3000
039 04:02:48	-178.52	3001
039 05:47:42	155.13	3002
039 07:32:36	128.78	3003
039 09:17:30	102.43	3004
039 11:02:24	76.08	3005
039 12:47:18	49.73	3006
039 14:32:12	23.38	3007
039 16:17:06	-2.97	3008
039 18:02:00	-29.32	3009
039 19:46:54	-55.67	3010
039 21:31:47	-82.03	3011
039 23:16:41	-108.38	3012

040 00:53:17	-45.50	34508
040 02:38:09	-71.84	34509
040 04:23:01	-98.18	34510
040 06:07:53	-124.52	34511
040 07:52:45	-150.87	34512
040 09:37:37	-177.21	34513
040 11:22:29	156.45	34514
040 13:07:21	130.11	34515
040 14:52:13	103.76	34516
040 16:37:05	77.42	34517
040 18:21:57	51.08	34518
040 20:06:49	24.74	34519
040 21:51:41	-1.61	34520
040 23:36:33	-27.95	34521

040 01:19:55	-2.15	28248
040 03:04:50	-28.50	28249
040 04:49:46	-54.86	28250
040 06:34:41	-81.21	28251
040 08:19:36	-107.57	28252
040 10:04:31	-133.92	28253
040 11:49:26	-160.28	28254
040 13:34:21	173.37	28255
040 15:19:16	147.01	28256
040 17:04:11	120.66	28257
040 18:49:06	94.30	28258
040 20:34:02	67.95	28259
040 22:18:57	41.59	28260

040 01:01:35	-134.73	3013
040 02:46:29	-161.08	3014
040 04:31:23	172.57	3015
040 06:16:17	146.22	3016
040 08:01:11	119.87	3017
040 09:46:05	93.52	3018
040 11:30:59	67.17	3019
040 13:15:53	40.82	3020
040 15:00:47	14.47	3021
040 16:45:41	-11.88	3022
040 18:30:35	-38.23	3023
040 20:15:29	-64.58	3024
040 22:00:23	-90.93	3025
040 23:45:17	-117.28	3026

041 01:21:25	-54.29	34522
041 03:06:17	-80.63	34523
041 04:51:09	-106.98	34524
041 06:36:01	-133.32	34525
041 08:20:54	-159.66	34526
041 10:05:46	174.00	34527
041 11:50:38	147.65	34528
041 13:35:30	121.31	34529
041 15:20:22	94.97	34530
041 17:05:14	68.63	34531
041 18:50:06	42.28	34532
041 20:34:58	15.94	34533
041 22:19:50	-10.40	34534

041 00:03:52	15.24	28261
041 01:48:47	-11.12	28262
041 03:33:42	-37.48	28263
041 05:18:37	-63.83	28264
041 07:03:32	-90.19	28265
041 08:48:27	-116.54	28266
041 10:33:23	-142.89	28267
041 12:18:18	-169.25	28268
041 14:03:13	164.39	28269
041 15:48:08	138.04	28270
041 17:33:03	111.68	28271
041 19:17:58	85.33	28272
041 21:02:53	58.97	28273
041 22:47:48	32.62	28274

041 01:30:11	-143.63	3027
041 03:15:05	-169.98	3028
041 04:59:59	163.67	3029
041 06:44:53	137.32	3030
041 08:29:47	110.97	3031
041 10:14:41	84.62	3032
041 11:59:35	58.27	3033
041 13:44:29	31.92	3034
041 15:29:23	5.57	3035
041 17:14:17	-20.78	3036
041 18:59:11	-47.13	3037
041 20:44:05	-73.48	3038
041 22:28:59	-99.83	3039

042 00:04:42	-36.74	34535
042 01:49:34	-63.09	34536
042 03:34:26	-89.43	34537
042 05:19:18	-115.77	34538
042 07:04:10	-142.11	34539
042 08:49:02	-168.46	34540
042 10:33:54	165.20	34541
042 12:18:46	138.86	34542
042 14:03:38	112.52	34543
042 15:48:30	86.17	34544
042 17:33:22	59.83	34545
042 19:18:14	33.49	34546
042 21:03:06	7.15	34547
042 22:47:58	-19.20	34548

042 00:32:44	6.26	28275
042 02:17:39	-20.09	28276
042 04:02:34	-46.45	28277
042 05:47:29	-72.80	28278
042 07:32:24	-99.16	28279
042 09:17:19	-125.51	28280
042 11:02:14	-151.87	28281
042 12:47:09	-178.23	28282
042 14:32:05	155.42	28283
042 16:17:00	129.07	28284
042 18:01:55	102.71	28285
042 19:46:50	76.36	28286
042 21:31:45	50.00	28287
042 23:16:40	23.64	28288

042 00:13:53	-126.18	3040
042 01:58:47	-152.54	3041
042 03:43:41	-178.89	3042
042 05:28:35	154.76	3043
042 07:13:29	128.41	3044
042 08:58:23	102.06	3045
042 10:43:17	75.71	3046
042 12:28:11	49.36	3047
042 14:13:05	23.01	3048
042 15:57:59	-3.34	3049
042 17:42:53	-29.69	3050
042 19:27:47	-56.04	3051
042 21:12:41	-82.39	3052
042 22:57:35	-108.74	3053

SATELLITE S2							SATELLITE S3							SATELLITE S4							
Ascending Node Predictions							Ascending Node Predictions							Ascending Node Predictions							
Predicting for 182 days							Predicting for 183 days							Predicting for 183 days							
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT		
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc
039 00:15:50	-106.26	26575	039 00:54:27	-81.61	17623	039 00:56:01	-164.96	7074													
039 01:57:59	-131.75	26576	039 02:35:42	-106.92	17624	039 02:38:07	169.52	7075													
039 03:40:01	-157.26	26577	039 04:16:56	-132.23	17625	039 04:20:14	143.99	7076													
039 05:22:03	177.23	26578	039 05:58:11	-157.54	17626	039 06:02:20	118.47	7077													
039 07:04:05	151.73	26579	039 07:39:25	177.15	17627	039 07:44:26	92.95	7078													
039 08:46:07	126.22	26580	039 09:20:40	151.84	17628	039 09:26:32	67.42	7079													
039 10:28:09	100.71	26581	039 11:01:55	126.52	17629	039 11:08:39	41.89	7080													
039 12:10:10	75.22	26582	039 12:43:09	101.22	17630	039 12:50:45	16.37	7081													
039 13:52:12	49.71	26583	039 14:24:24	75.90	17631	039 14:32:51	-9.15	7082													
039 15:34:14	24.20	26584	039 16:05:38	50.60	17632	039 16:14:58	-34.69	7083													
039 17:16:16	-1.31	26585	039 17:46:53	25.28	17633	039 17:57:04	-60.21	7084													
039 18:58:18	-26.81	26586	039 19:28:08	-0.04	17634	039 19:39:10	-85.73	7085													
039 20:40:19	-52.31	26587	039 21:09:22	-25.34	17635	039 21:21:17	-111.26	7086													
039 22:22:21	-77.81	26588	039 22:50:37	-50.66	17636	039 23:03:23	-136.79	7087													
040 00:04:23	-103.32	26589	040 00:31:51	-75.96	17637	040 00:45:29	-162.31	7088													
040 01:46:25	-128.83	26590	040 02:13:06	-101.28	17638	040 02:27:36	172.16	7089													
040 03:28:27	-154.34	26591	040 03:54:21	-126.59	17639	040 04:09:42	146.64	7090													
040 05:10:29	-179.84	26592	040 05:35:35	-151.90	17640	040 05:51:48	121.12	7091													
040 06:52:30	154.66	26593	040 07:16:50	-177.21	17641	040 07:33:55	95.58	7092													
040 08:34:32	129.15	26594	040 08:58:04	157.48	17642	040 09:16:01	70.06	7093													
040 10:16:34	103.65	26595	040 10:39:19	132.17	17643	040 10:58:07	44.54	7094													
040 11:58:36	78.14	26596	040 12:20:34	106.85	17644	040 12:40:14	19.00	7095													
040 13:40:38	52.63	26597	040 14:01:48	81.55	17645	040 14:22:20	-6.52	7096													
040 15:22:40	27.12	26598	040 15:43:03	56.23	17646	040 16:04:26	-32.04	7097													
040 17:04:41	1.63	26599	040 17:24:17	30.93	17647	040 17:46:33	-57.57	7098													
040 18:46:43	-23.88	26600	040 19:05:32	5.61	17648	040 19:28:39	-83.10	7099													
040 20:28:45	-49.39	26601	040 20:46:46	-19.69	17649	040 21:10:45	-108.62	7100													
040 22:10:47	-74.89	26602	040 22:28:01	-45.01	17650	040 22:52:52	-134.15	7101													
040 23:52:49	-100.40	26603																			
041 01:34:50	-125.90	26604	041 00:09:16	-70.33	17651	041 00:34:58	-159.67	7102													
041 03:16:52	-151.40	26605	041 01:50:30	-95.63	17652	041 02:17:04	174.81	7103													
041 04:58:54	-176.91	26606	041 03:31:45	-120.95	17653	041 03:59:11	199.27	7104													
041 06:40:56	157.58	26607	041 05:12:59	-146.25	17654	041 05:41:17	123.75	7105													
041 08:22:58	132.07	26608	041 06:54:14	-171.57	17655	041 07:23:23	98.23	7106													
041 10:05:00	106.57	26609	041 08:35:29	163.12	17656	041 09:05:30	72.69	7107													
041 11:47:01	81.07	26610	041 10:16:43	137.81	17657	041 10:47:36	47.17	7108													
041 13:29:03	55.56	26611	041 11:57:58	112.50	17658	041 12:29:42	21.65	7109													
041 15:11:05	30.06	26612	041 13:39:12	87.19	17659	041 14:11:49	-3.88	7110													
041 16:53:07	4.55	26613	041 15:20:27	61.88	17660	041 15:53:55	-29.40	7111													
041 18:35:09	-20.96	26614	041 17:01:42	36.56	17661	041 17:36:01	-54.93	7112													
041 20:17:10	-46.45	26615	041 18:42:56	11.26	17662	041 19:18:08	-80.46	7113													
041 21:59:12	-71.96	26616	041 20:24:11	-14.06	17663	041 21:00:14	-105.98	7114													
041 23:41:14	-97.47	26617	041 22:05:25	-39.36	17664	041 22:42:20	-131.50	7115													
			041 23:46:40	-64.68	17665																
042 01:23:16	-122.97	26618	042 01:27:55	-89.99	17666	042 00:24:27	-157.04	7116													
042 03:05:18	-148.48	26619	042 03:09:09	-115.30	17667	042 02:06:33	177.44	7117													
042 04:47:20	-173.99	26620	042 04:50:24	-140.61	17668	042 03:48:39	151.92	7118													
042 06:29:21	160.52	26621	042 06:31:38	-165.92	17669	042 05:30:46	126.38	7119													
042 08:11:23	135.01	26622	042 08:12:53	168.77	17670	042 07:12:52	100.86	7120													
042 09:53:25	109.50	26623	042 09:54:08	143.45	17671	042 08:54:58	75.34	7121													
042 11:35:27	83.99	26624	042 11:35:22	118.15	17672	042 10:37:05	49.81	7122													
042 13:17:29	58.49	26625	042 13:16:37	92.83	17673	042 12:19:11	24.29	7123													
042 14:59:31	32.98	26626	042 14:57:51	67.53	17674	042 14:01:17	-1.24	7124													
042 16:41:32	7.48	26627	042 16:39:06	42.21	17675	042 15:43:24	-26.77	7125													
042 18:23:34	-18.02	26628	042 18:20:21	16.89	17676	042 17:25:30	-52.29	7126													
042 20:05:36	-43.53	26629	042 20:01:35	-8.41	17677	042 19:07:36	-77.81	7127													
042 21:47:38	-69.04	26630	042 21:42:50	-33.73	17678	042 20:49:43	-103.35	7128													
042 23:29:40	-94.55	26631	042 23:24:04	-59.03	17679	042 22:31:49	-128.87	7129													

**SATELLITE C2****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

043 00:32:50	-45.54	34549
043 02:17:43	-71.88	34550
043 04:02:35	-98.22	34551
043 05:47:27	-124.56	34552
043 07:32:19	-150.91	34553
043 09:17:11	-177.25	34554
043 11:02:03	156.41	34555
043 12:46:55	130.06	34556
043 14:31:47	103.72	34557
043 16:16:39	77.38	34558
043 18:01:31	51.04	34559
043 19:46:23	24.69	34560
043 21:31:15	-1.65	34561
043 23:16:07	-27.99	34562

**SATELLITE C3****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

043 01:01:35	-2.71	28289
043 02:46:30	-29.07	28290
043 04:31:26	-55.42	28291
043 06:16:21	-81.77	28292
043 08:01:16	-108.13	28293
043 09:46:11	-134.49	28294
043 11:31:06	-160.84	28295
043 13:16:01	172.80	28296
043 15:00:56	146.45	28297
043 16:45:51	120.09	28298
043 18:30:46	93.74	28299
043 20:15:42	67.38	28300
043 22:00:37	41.03	28301
043 23:45:32	14.67	28302

**SATELLITE C4****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

043 00:42:29	-135.09	3054
043 02:27:22	-161.44	3055
043 04:12:16	172.21	3056
043 05:57:10	145.86	3057
043 07:42:04	119.51	3058
043 09:26:58	93.16	3059
043 11:11:52	66.81	3060
043 12:56:46	40.46	3061
043 14:41:40	14.11	3062
043 16:26:34	-12.24	3063
043 18:11:28	-38.59	3064
043 19:56:22	-64.95	3065
043 21:41:16	-91.30	3066
043 23:26:10	-117.65	3067

044 01:00:59	-54.33	34563
044 02:45:51	-80.68	34564
044 04:30:43	-107.02	34565
044 06:15:35	-133.36	34566
044 08:00:27	-159.70	34567
044 09:45:19	173.95	34568
044 11:30:11	147.61	34569
044 13:15:03	121.27	34570
044 14:59:55	94.93	34571
044 16:44:47	68.58	34572
044 18:29:39	42.24	34573
044 20:14:32	15.90	34574
044 21:59:24	-10.44	34575
044 23:44:16	-36.78	34576

044 01:30:27	-11.68	28303
044 03:15:22	-38.04	28304
044 05:00:17	-64.39	28305
044 06:45:12	-90.75	28306
044 08:30:07	-117.11	28307
044 10:15:03	-143.46	28308
044 11:59:58	-169.81	28309
044 13:44:53	163.83	28310
044 15:29:48	137.48	28311
044 17:14:43	111.12	28312
044 18:59:38	84.76	28313
044 20:44:33	58.41	28314
044 22:29:28	32.05	28315

044 01:11:04	-144.00	3068
044 02:55:58	-170.35	3069
044 04:40:52	163.30	3070
044 06:25:46	136.95	3071
044 08:10:40	110.60	3072
044 09:55:34	84.25	3073
044 11:40:28	57.90	3074
044 13:25:22	31.55	3075
044 15:10:16	5.20	3076
044 16:55:10	-21.15	3077
044 18:40:04	-47.50	3078
044 20:24:58	-73.85	3079
044 22:09:52	-100.20	3080
044 23:54:46	-126.55	3081

045 01:29:08	-63.13	34577
045 03:14:00	-89.47	34578
045 04:58:52	-115.81	34579
045 06:43:44	-142.15	34580
045 08:28:36	-168.50	34581
045 10:13:28	165.16	34582
045 11:58:20	138.82	34583
045 13:43:12	112.48	34584
045 15:28:04	86.13	34585
045 17:12:56	59.79	34586
045 18:57:48	33.45	34587
045 20:42:40	7.10	34588
045 22:27:32	-19.24	34589

045 00:14:24	5.70	28316
045 01:59:19	-20.66	28317
045 03:44:14	-47.01	28318
045 05:29:09	-73.37	28319
045 07:14:04	-99.72	28320
045 08:58:59	-126.08	28321
045 10:43:54	-152.43	28322
045 12:28:49	-178.79	28323
045 14:13:45	154.86	28324
045 15:58:40	128.50	28325
045 17:43:35	102.15	28326
045 19:28:30	75.79	28327
045 21:13:25	49.44	28328
045 22:58:20	23.08	28329

045 01:39:40	-152.90	3082
045 03:24:34	-179.25	3083
045 05:09:28	154.40	3084
045 06:54:22	128.05	3085
045 08:39:16	101.70	3086
045 10:24:10	75.35	3087
045 12:09:04	49.00	3088
045 13:53:58	22.65	3089
045 15:38:52	-3.70	3090
045 17:23:46	-30.05	3091
045 19:08:40	-56.40	3092
045 20:53:34	-82.75	3093
045 22:38:28	-109.10	3094

046 00:12:24	-45.58	34590
046 01:57:16	-71.92	34591
046 03:42:08	-98.27	34592
046 05:27:00	-124.61	34593
046 07:11:52	-150.95	34594
046 08:56:44	-177.29	34595
046 10:41:36	156.36	34596
046 12:26:28	130.02	34597
046 14:11:20	103.68	34598
046 15:56:12	77.34	34599
046 17:41:05	51.00	34600
046 19:25:57	24.65	34601
046 21:10:49	-1.69	34602
046 22:55:41	-28.03	34603

046 00:43:15	-3.28	28330
046 02:28:10	-29.63	28331
046 04:13:06	-55.98	28332
046 05:58:01	-82.34	28333
046 07:42:56	-108.69	28334
046 09:27:51	-135.05	28335
046 11:12:46	-161.41	28336
046 12:57:41	172.24	28337
046 14:42:36	145.88	28338
046 16:27:31	119.53	28339
046 18:12:27	93.17	28340
046 19:57:22	66.82	28341
046 21:42:17	40.46	28342
046 23:27:12	14.11	28343

046 00:23:21	-135.46	3095
046 02:08:15	-161.81	3096
046 03:53:09	171.84	3097
046 05:38:03	145.49	3098
046 07:22:57	119.14	3099
046 09:07:51	92.79	3100
046 10:52:45	66.44	3101
046 12:37:39	40.09	3102
046 14:22:33	13.74	3103
046 16:07:27	-12.61	3104
046 17:52:21	-38.96	3105
046 19:37:15	-65.31	3106
046 21:22:09	-91.66	3107
046 23:07:03	-118.01	3108

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	day	hr mn sc	deg dg
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg
043 01:11:41	-120.04	26632	043 01:05:19	-84.35	17680	043 00:13:55	-154.39	7130			
043 02:53:43	-145.55	26633	043 02:46:34	-109.66	17681	043 01:56:01	-179.91	7131			
043 04:35:45	-171.06	26634	043 04:27:48	-134.97	17682	043 03:38:08	154.55	7132			
043 06:17:47	163.44	26635	043 06:09:03	-160.28	17683	043 05:20:14	129.03	7133			
043 07:59:49	137.93	26636	043 07:50:17	174.41	17684	043 07:02:20	103.51	7134			
043 09:41:51	112.42	26637	043 09:31:32	149.10	17685	043 08:44:27	77.98	7135			
043 11:23:52	86.93	26638	043 11:12:46	123.79	17686	043 10:26:33	52.46	7136			
043 13:05:54	61.42	26639	043 12:54:01	98.48	17687	043 12:08:39	26.93	7137			
043 14:47:56	35.91	26640	043 14:35:16	73.16	17688	043 13:50:46	1.40	7138			
043 16:29:58	10.40	26641	043 16:16:30	47.86	17689	043 15:32:52	-24.12	7139			
043 18:12:00	-15.10	26642	043 17:57:45	22.54	17690	043 17:14:58	-49.64	7140			
043 19:54:01	-40.60	26643	043 19:38:59	-2.76	17691	043 18:57:05	-75.18	7141			
043 21:36:03	-66.10	26644	043 21:20:14	-28.08	17692	043 20:39:11	-100.70	7142			
043 23:18:05	-91.61	26645	043 23:01:29	-53.40	17693	043 22:21:17	-126.22	7143			
044 01:00:07	-117.12	26646	044 00:42:43	-78.70	17694	044 00:03:24	-151.76	7144			
044 02:42:09	-142.63	26647	044 02:23:58	-104.02	17695	044 01:45:30	-177.28	7145			
044 04:24:11	-168.14	26648	044 04:05:12	-129.32	17696	044 03:27:36	157.20	7146			
044 06:06:12	166.37	26649	044 05:46:27	-154.64	17697	044 05:09:43	131.67	7147			
044 07:48:14	140.86	26650	044 07:27:42	-179.95	17698	044 06:51:49	106.15	7148			
044 09:30:16	115.36	26651	044 09:08:56	154.74	17699	044 08:33:55	80.62	7149			
044 11:12:18	89.85	26652	044 10:50:11	129.43	17700	044 10:16:02	55.09	7150			
044 12:54:20	64.34	26653	044 12:31:25	104.12	17701	044 11:58:08	29.57	7151			
044 14:36:22	38.83	26654	044 14:12:40	78.81	17702	044 13:40:14	4.05	7152			
044 16:18:23	13.34	26655	044 15:53:55	53.49	17703	044 15:22:21	-21.49	7153			
044 18:00:25	-12.17	26656	044 17:35:09	28.19	17704	044 17:04:27	-47.01	7154			
044 19:42:27	-37.68	26657	044 19:16:24	2.87	17705	044 18:46:33	-72.53	7155			
044 21:24:29	-63.18	26658	044 20:57:38	-22.43	17706	044 20:28:40	-98.06	7156			
044 23:06:31	-88.69	26659	044 22:38:53	-47.75	17707	044 22:10:46	-123.59	7157			
044 23:52:52	-149.11	26659									
045 00:48:32	-114.19	26660	045 00:20:08	-73.07	17708	045 01:34:59	-174.64	7159			
045 02:30:34	-139.69	26661	045 02:01:22	-98.37	17709	045 03:17:05	159.84	7160			
045 04:12:36	-165.20	26662	045 03:42:37	-123.69	17710	045 04:59:11	134.32	7161			
045 05:54:38	169.29	26663	045 05:23:51	-148.99	17711	045 06:41:18	108.78	7162			
045 07:36:40	143.78	26664	045 07:05:06	-174.31	17712	045 08:23:24	83.26	7163			
045 09:18:42	118.28	26665	045 08:46:21	160.38	17713	045 10:05:30	57.74	7164			
045 11:00:43	92.78	26666	045 10:27:35	135.08	17714	045 11:47:37	32.20	7165			
045 12:42:45	67.27	26667	045 12:08:50	109.76	17715	045 13:29:43	6.68	7166			
045 14:24:47	41.77	26668	045 13:50:04	84.46	17716	045 15:11:49	-18.84	7167			
045 16:06:49	16.26	26669	045 15:31:19	59.14	17717	045 16:53:56	-44.37	7168			
045 17:48:51	-9.25	26670	045 17:12:34	33.82	17718	045 18:36:02	-69.89	7169			
045 19:30:52	-34.74	26671	045 18:53:48	8.52	17719	045 20:18:08	-95.42	7170			
045 21:12:54	-60.25	26672	045 20:35:03	-16.80	17720	045 22:00:15	-120.95	7171			
045 22:54:56	-85.76	26673	045 22:16:17	-42.10	17721	045 23:42:21	-146.47	7172			
045 23:57:32	-67.42	26672									
046 00:36:58	-111.26	26674	046 01:38:47	-92.73	17723	046 01:24:27	-171.99	7173			
046 02:19:00	-136.77	26675	046 03:20:01	-118.04	17724	046 03:06:34	162.47	7174			
046 04:01:02	-162.28	26676	046 05:01:16	-143.35	17725	046 04:48:40	136.95	7175			
046 05:43:03	172.23	26677	046 06:42:30	-168.66	17726	046 06:30:46	111.43	7176			
046 07:25:05	146.72	26678	046 08:23:45	166.03	17727	046 08:12:53	85.89	7177			
046 09:07:07	121.21	26679	046 10:05:00	140.71	17728	046 09:54:59	60.37	7178			
046 10:49:09	95.70	26680	046 11:46:14	115.41	17729	046 11:37:05	34.85	7179			
046 12:31:11	70.20	26681	046 13:27:29	90.09	17730	046 13:19:12	9.32	7180			
046 14:13:13	44.69	26682	046 15:08:43	64.79	17731	046 15:01:18	-16.20	7181			
046 15:55:14	19.19	26683	046 16:49:58	39.47	17732	046 16:43:24	-41.73	7182			
046 17:37:16	-6.31	26684	046 18:31:12	14.17	17733	046 18:25:31	-67.26	7183			
046 19:19:18	-31.82	26685	046 20:12:27	-11.15	17734	046 20:07:37	-92.78	7184			
046 21:01:20	-57.33	26686	046 21:53:42	-36.47	17735	046 21:49:43	-118.30	7185			
046 22:43:22	-82.84	26687	046 23:34:56	-61.77	17736	046 23:31:50	-143.84	7186			

SATELLITE C2				SATELLITE C3				SATELLITE C4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 183 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT
day hr mn sc	deg	dg		day hr mn sc	deg	dg		day hr mn sc	deg	dg	
047 00:40:33	-54.37	34604		047 01:12:07	-12.25	28344		047 00:51:57	-144.36	3109	
047 02:25:25	-80.72	34605		047 02:57:02	-38.60	28345		047 02:36:51	-170.71	3110	
047 04:10:17	-107.06	34606		047 04:41:57	-64.96	28346		047 04:21:45	162.94	3111	
047 05:55:09	-133.40	34607		047 06:26:52	-91.31	28347		047 06:06:39	136.59	3112	
047 07:40:01	-159.74	34608		047 08:11:48	-117.67	28348		047 07:51:33	110.24	3113	
047 09:24:53	173.91	34609		047 09:56:43	-144.02	28349		047 09:36:27	83.89	3114	
047 11:09:45	147.57	34610		047 11:41:38	-170.38	28350		047 11:21:21	57.54	3115	
047 12:54:37	121.23	34611		047 13:26:33	163.27	28351		047 13:06:15	31.19	3116	
047 14:39:29	94.89	34612		047 15:11:28	136.91	28352		047 14:51:09	4.84	3117	
047 16:24:21	68.54	34613		047 16:56:23	110.56	28353		047 16:36:03	-21.51	3118	
047 18:09:13	42.20	34614		047 18:41:16	84.20	28354		047 18:20:57	-47.86	3119	
047 19:54:05	15.86	34615		047 20:26:13	57.84	28355		047 20:05:51	-74.21	3120	
047 21:38:57	-10.48	34616		047 22:11:09	31.49	28356		047 21:50:45	-100.56	3121	
047 23:23:49	-36.83	34617		047 23:56:04	5.14	28357		047 23:35:39	-126.91	3122	
048 01:08:41	-63.17	34618		048 01:40:59	-21.22	28358		048 01:20:33	-153.26	3123	
048 02:53:33	-89.51	34619		048 03:25:54	-47.58	28359		048 03:05:27	-179.62	3124	
048 04:38:25	-115.85	34620		048 05:10:49	-73.93	28360		048 04:50:21	154.03	3125	
048 06:23:17	-142.20	34621		048 06:55:44	-100.29	28361		048 06:35:15	127.68	3126	
048 08:08:09	-168.54	34622		048 08:40:39	-126.64	28362		048 08:20:09	101.33	3127	
048 09:53:01	165.12	34623		048 10:25:34	-153.00	28363		048 10:05:03	74.98	3128	
048 11:37:53	138.78	34624		048 12:10:30	-179.35	28364		048 11:49:57	48.63	3129	
048 13:22:45	112.43	34625		048 13:55:25	154.29	28365		048 13:34:51	22.28	3130	
048 15:07:37	86.09	34626		048 15:40:20	127.94	28366		048 15:19:45	-4.07	3131	
048 16:52:29	59.75	34627		048 17:25:15	101.58	28367		048 17:04:39	-30.42	3132	
048 18:37:22	33.41	34628		048 19:10:10	75.23	28368		048 18:49:33	-56.77	3133	
048 20:22:14	7.07	34629		048 20:55:05	48.87	28369		048 20:34:27	-83.12	3134	
048 22:07:06	-19.28	34630		048 22:40:00	22.52	28370		048 22:19:20	-109.47	3135	
048 23:51:58	-45.62	34631									
049 01:36:50	-71.96	34632		049 00:24:55	-3.84	28371		049 00:04:14	-135.82	3136	
049 03:21:42	-98.30	34633		049 02:09:51	-30.19	28372		049 01:49:08	-162.17	3137	
049 05:06:34	-124.65	34634		049 03:54:46	-56.55	28373		049 03:34:02	171.48	3138	
049 06:51:26	-150.99	34635		049 05:39:41	-82.90	28374		049 05:18:56	145.13	3139	
049 08:36:18	-177.33	34636		049 07:24:36	-109.26	28375		049 07:03:50	118.78	3140	
049 10:21:10	156.32	34637		049 09:09:31	-135.61	28376		049 08:48:44	92.43	3141	
049 12:06:02	129.98	34638		049 10:54:26	-161.97	28377		049 10:33:38	66.08	3142	
049 13:50:54	103.64	34639		049 12:39:21	171.67	28378		049 12:18:32	39.73	3143	
049 15:35:46	77.30	34640		049 14:24:17	145.32	28379		049 14:03:26	13.38	3144	
049 17:20:38	50.95	34641		049 16:09:12	118.97	28380		049 15:48:20	-12.97	3145	
049 19:05:30	24.61	34642		049 17:54:07	92.61	28381		049 17:33:14	-39.32	3146	
049 20:50:22	-1.73	34643		049 19:39:02	66.25	28382		049 19:18:08	-65.67	3147	
049 22:35:14	-28.07	34644		049 21:23:57	39.90	28383		049 21:03:02	-92.02	3148	
				049 23:08:52	13.54	28384		049 22:47:56	-118.38	3149	
050 00:20:06	-54.42	34645		050 00:53:47	-12.81	28385		050 00:32:50	-144.73	3150	
050 02:04:58	-80.76	34646		050 02:38:42	-39.17	28386		050 02:17:44	-171.08	3151	
050 03:49:50	-107.10	34647		050 04:23:38	-65.52	28387		050 04:02:38	162.57	3152	
050 05:34:42	-133.44	34648		050 06:08:33	-91.88	28388		050 05:47:32	136.22	3153	
050 07:19:34	-159.79	34649		050 07:53:28	-118.23	28389		050 07:32:26	109.87	3154	
050 09:04:26	173.87	34650		050 09:38:23	-144.59	28390		050 09:17:20	83.52	3155	
050 10:49:18	147.53	34651		050 11:23:18	-170.94	28391		050 11:02:14	57.17	3156	
050 12:34:10	121.19	34652		050 13:08:13	162.70	28392		050 12:47:09	30.82	3157	
050 14:19:02	94.84	34653		050 14:53:08	136.35	28393		050 14:32:02	4.47	3158	
050 16:03:54	68.50	34654		050 16:38:03	109.99	28394		050 16:16:56	-21.88	3159	
050 17:48:46	42.16	34655		050 18:22:59	83.64	28395		050 18:01:50	-48.23	3160	
050 19:33:38	15.82	34656		050 20:07:54	57.28	28396		050 19:46:44	-74.58	3161	
050 21:18:31	-10.52	34657		050 21:52:49	30.93	28397		050 21:31:38	-100.93	3162	
050 23:03:23	-36.87	34658		050 23:37:44	4.57	28398		050 23:16:32	-127.28	3163	

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	day	hr mn sc	deg dg
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg
047 00:25:23	-108.33	26688	047 01:16:11	-87.09	17737	047 01:13:56	-169.36	7187			
047 02:07:25	-133.84	26689	047 02:57:25	-112.39	17738	047 02:56:02	165.12	7188			
047 03:49:27	-159.35	26690	047 04:38:40	-137.71	17739	047 04:38:09	139.59	7189			
047 05:31:29	175.15	26691	047 06:19:55	-163.02	17740	047 06:20:15	114.06	7190			
047 07:13:31	149.64	26692	047 08:01:09	171.67	17741	047 08:02:21	88.54	7191			
047 08:55:33	124.13	26693	047 09:42:24	146.36	17742	047 09:44:28	63.01	7192			
047 10:37:34	98.64	26694	047 11:23:38	121.05	17743	047 11:26:34	37.49	7193			
047 12:19:36	73.13	26695	047 13:04:53	95.74	17744	047 13:08:40	11.97	7194			
047 14:01:38	47.62	26696	047 14:46:08	70.42	17745	047 14:50:47	-13.57	7195			
047 15:43:40	22.11	26697	047 16:27:22	45.12	17746	047 16:32:53	-39.09	7196			
047 17:25:42	-3.39	26698	047 18:08:37	19.80	17747	047 18:14:59	-64.61	7197			
047 19:07:43	-28.89	26699	047 19:49:51	-5.50	17748	047 19:57:06	-90.15	7198			
047 20:49:45	-54.39	26700	047 21:31:06	-30.82	17749	047 21:39:12	-115.67	7199			
047 22:31:47	-79.90	26701	047 23:12:21	-56.14	17750	047 23:21:18	-141.19	7200			
048 00:13:49	-105.41	26702	048 00:53:35	-81.44	17751	048 01:03:24	-166.71	7201			
048 01:55:51	-130.92	26703	048 02:34:50	-106.76	17752	048 02:45:31	167.76	7202			
048 03:37:53	-156.43	26704	048 04:16:04	-132.06	17753	048 04:27:37	142.23	7203			
048 05:19:54	178.08	26705	048 05:57:19	-157.37	17754	048 06:09:43	116.71	7204			
048 07:01:56	152.57	26706	048 07:38:34	177.31	17755	048 07:51:50	91.18	7205			
048 08:43:58	127.07	26707	048 09:19:48	152.01	17756	048 09:33:56	65.66	7206			
048 10:26:00	101.56	26708	048 11:01:03	126.69	17757	048 11:16:02	40.14	7207			
048 12:08:02	76.05	26709	048 12:42:17	101.39	17758	048 12:58:09	14.60	7208			
048 13:50:04	50.54	26710	048 14:23:32	76.07	17759	048 14:40:15	-10.92	7209			
048 15:32:05	25.05	26711	048 16:04:47	50.75	17760	048 16:22:21	-36.44	7210			
048 17:14:07	-4.46	26712	048 17:46:01	25.45	17761	048 18:04:28	-61.98	7211			
048 18:56:09	-25.97	26713	048 19:27:16	-13	17762	048 19:46:34	-87.50	7212			
048 20:38:11	-51.47	26714	048 21:08:30	-25.17	17763	048 21:28:40	-113.02	7213			
048 22:20:13	-76.98	26715	048 22:49:45	-50.49	17764	048 23:10:47	-138.55	7214			
049 00:02:14	-102.48	26716	049 00:31:00	-75.80	17765	049 00:52:53	-164.07	7215			
049 01:44:16	-127.98	26717	049 02:12:14	-101.11	17766	049 02:34:59	170.40	7216			
049 03:26:18	-153.49	26718	049 03:53:29	-126.42	17767	049 04:17:06	144.87	7217			
049 05:08:20	-179.00	26719	049 05:34:43	-151.73	17768	049 05:59:12	119.35	7218			
049 06:50:22	155.49	26720	049 07:15:58	-177.04	17769	049 07:41:18	93.83	7219			
049 08:32:24	129.99	26721	049 08:57:13	157.64	17770	049 09:23:25	68.29	7220			
049 10:14:25	104.49	26722	049 10:38:27	132.34	17771	049 11:05:31	42.77	7221			
049 11:56:27	78.98	26723	049 12:19:42	107.02	17772	049 12:47:37	17.25	7222			
049 13:38:29	53.48	26724	049 14:00:56	81.72	17773	049 14:29:44	-8.29	7223			
049 15:20:31	27.97	26725	049 15:42:11	56.40	17774	049 16:11:50	-33.81	7224			
049 17:02:33	2.46	26726	049 17:23:26	31.08	17775	049 17:53:56	-59.33	7225			
049 18:44:35	-23.05	26727	049 19:04:40	5.78	17776	049 19:36:03	-84.86	7226			
049 20:26:36	-48.54	26728	049 20:45:55	-19.54	17777	049 21:18:09	-110.38	7227			
049 22:08:38	-74.05	26729	049 22:27:09	-44.84	17778	049 23:00:15	-135.90	7228			
049 23:50:40	-99.56	26730									
050 01:32:42	-125.06	26731	050 00:08:24	-70.16	17779	050 00:42:22	-161.44	7229			
050 03:14:44	-150.57	26732	050 01:49:39	-95.47	17780	050 02:24:28	173.04	7230			
050 04:56:45	-176.06	26733	050 03:30:53	-120.78	17781	050 04:06:34	147.52	7231			
050 06:38:47	158.43	26734	050 05:12:08	-146.09	17782	050 05:48:41	121.98	7232			
050 08:20:49	132.92	26735	050 06:53:22	-171.40	17783	050 07:30:47	96.46	7233			
050 10:02:51	107.41	26736	050 08:34:37	163.29	17784	050 09:12:53	70.94	7234			
050 11:44:53	81.91	26737	050 10:15:52	137.97	17785	050 10:55:00	45.41	7235			
050 13:26:55	56.40	26738	050 11:57:06	112.67	17786	050 12:37:06	19.88	7236			
050 15:08:56	30.90	26739	050 13:38:21	87.35	17787	050 14:19:12	-5.64	7237			
050 16:50:58	5.40	26740	050 15:19:35	62.05	17788	050 16:01:19	-31.17	7238			
050 18:33:00	-20.11	26741	050 17:00:50	36.73	17789	050 17:43:25	-56.69	7239			
050 20:15:02	-45.62	26742	050 18:42:05	11.42	17790	050 19:25:31	-82.21	7240			
050 21:57:04	-71.13	26743	050 20:23:19	-13.89	17791	050 21:07:38	-107.75	7241			
050 23:39:05	-96.62	26744	050 22:04:34	-39.20	17792	050 22:49:44	-133.27	7242			
			050 23:45:48	-64.51	17793						

SATELLITE C2				SATELLITE C3				SATELLITE C4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 183 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT
day hr mn sc	deg	dg		day hr mn sc	deg	dg		day hr mn sc	deg	dg	
051 00:48:15	-63.21	34659		051 01:22:39	-21.79	28399		051 01:01:26	-153.63	3164	
051 02:33:07	-89.55	34660		051 03:07:34	-48.14	28400		051 02:46:20	-179.98	3165	
051 04:17:59	-115.89	34661		051 04:52:29	-74.50	28401		051 04:31:14	153.67	3166	
051 06:02:51	-142.24	34662		051 06:37:24	-100.85	28402		051 06:16:08	127.32	3167	
051 07:47:43	-168.58	34663		051 08:22:20	-127.20	28403		051 08:01:02	100.97	3168	
051 09:32:35	165.08	34664		051 10:07:15	-153.56	28404		051 09:45:56	74.62	3169	
051 11:17:27	138.74	34665		051 11:52:10	-179.92	28405		051 11:30:50	48.27	3170	
051 13:02:19	112.39	34666		051 13:37:05	153.73	28406		051 13:15:44	21.92	3171	
051 14:47:11	86.05	34667		051 15:22:00	127.37	28407		051 15:00:38	-4.43	3172	
051 16:32:03	59.71	34668		051 17:06:55	101.02	28408		051 16:45:31	-30.78	3173	
051 18:16:55	33.37	34669		051 18:51:50	74.66	28409		051 18:30:25	-57.14	3174	
051 20:01:47	7.02	34670		051 20:36:46	48.31	28410		051 20:15:19	-83.49	3175	
051 21:46:39	-19.32	34671		051 22:21:41	21.95	28411		051 22:00:13	-109.84	3176	
051 23:31:31	-45.66	34672						051 23:45:07	-136.19	3177	
052 01:16:23	-72.00	34673		052 00:06:36	-4.40	28412		052 01:30:01	-162.54	3178	
052 03:01:15	-98.35	34674		052 01:51:31	-30.76	28413		052 03:14:55	171.11	3179	
052 04:46:07	-124.69	34675		052 03:36:26	-57.11	28414		052 04:59:49	144.76	3180	
052 06:30:59	-151.03	34676		052 05:21:21	-83.47	28415		052 06:44:43	118.41	3181	
052 08:15:51	-177.37	34677		052 07:06:16	-109.82	28416		052 08:29:37	92.06	3182	
052 10:00:43	156.28	34678		052 08:51:11	-136.18	28417		052 10:14:31	65.71	3183	
052 11:45:35	129.94	34679		052 10:36:07	-162.53	28418		052 11:59:25	39.36	3184	
052 13:30:27	103.60	34680		052 12:21:02	171.11	28419		052 13:44:19	13.01	3185	
052 15:15:19	77.26	34681		052 14:05:57	144.76	28420		052 15:29:13	-13.34	3186	
052 17:00:11	50.91	34682		052 15:50:52	118.40	28421		052 17:14:07	-39.69	3187	
052 18:45:03	24.57	34683		052 17:35:47	92.04	28422		052 18:59:01	-66.04	3188	
052 20:29:55	-1.77	34684		052 19:20:42	65.69	28423		052 20:43:55	-92.39	3189	
052 22:14:47	-28.11	34685		052 21:05:37	39.33	28424		052 22:28:49	-118.74	3190	
052 23:59:39	-54.46	34686		052 22:50:32	12.98	28425					
053 01:44:31	-80.80	34687		053 00:35:28	-13.38	28426		053 00:13:43	-145.09	3191	
053 03:29:23	-107.14	34688		053 02:20:23	-39.73	28427		053 01:58:37	-171.44	3192	
053 05:14:16	-133.48	34689		053 04:05:18	-66.09	28428		053 03:43:31	162.21	3193	
053 06:59:08	-159.82	34690		053 05:50:13	-92.44	28429		053 05:28:25	135.86	3194	
053 08:44:00	173.83	34691		053 07:35:08	-118.80	28430		053 07:13:19	109.51	3195	
053 10:28:52	147.49	34692		053 09:20:03	-145.15	28431		053 08:58:13	83.16	3196	
053 12:13:44	121.15	34693		053 11:04:58	-171.51	28432		053 10:43:07	56.81	3197	
053 13:58:36	94.81	34694		053 12:49:54	162.14	28433		053 12:28:01	30.46	3198	
053 15:43:28	68.46	34695		053 14:34:49	135.78	28434		053 14:12:55	4.11	3199	
053 17:28:20	42.12	34696		053 16:19:44	109.43	28435		053 15:57:49	-22.24	3200	
053 19:13:12	15.78	34697		053 18:04:39	83.07	28436		053 17:42:43	-48.59	3201	
053 20:58:04	-10.56	34698		053 19:49:34	56.72	28437		053 19:27:37	-74.94	3202	
053 22:42:56	-36.91	34699		053 21:34:29	30.36	28438		053 21:12:31	-101.29	3203	
				053 23:19:24	4.00	28439		053 22:57:25	-127.64	3204	
054 00:27:48	-63.25	34700		054 01:04:19	-22.35	28440		054 00:42:19	-153.99	3205	
054 02:12:40	-89.59	34701		054 02:49:15	-48.70	28441		054 02:27:13	179.66	3206	
054 03:57:32	-115.93	34702		054 04:34:10	-75.06	28442		054 04:12:07	153.31	3207	
054 05:42:24	-142.28	34703		054 06:19:05	-101.42	28443		054 05:57:01	126.96	3208	
054 07:27:16	-168.62	34704		054 08:04:00	-127.77	28444		054 07:41:55	100.61	3209	
054 09:12:08	165.04	34705		054 09:48:55	-154.13	28445		054 09:26:49	74.25	3210	
054 10:57:00	138.70	34706		054 11:33:50	179.52	28446		054 11:11:42	47.90	3211	
054 12:41:52	112.35	34707		054 13:18:45	153.16	28447		054 12:56:36	21.55	3212	
054 14:26:44	86.01	34708		054 15:03:41	126.81	28448		054 14:41:30	-4.80	3213	
054 16:11:36	59.67	34709		054 16:48:36	100.45	28449		054 16:26:24	-31.15	3214	
054 17:56:28	33.33	34710		054 18:33:31	74.10	28450		054 18:11:18	-57.50	3215	
054 19:41:20	6.98	34711		054 20:18:26	47.74	28451		054 19:56:12	-83.85	3216	
054 21:26:12	-19.36	34712		054 22:03:21	21.39	28452		054 21:41:06	-110.20	3217	
054 23:11:04	-45.70	34713		054 23:48:16	-4.97	28453		054 23:26:00	-136.55	3218	

West longitude is negative (-)

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	day	hr mn sc	deg dg
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg
051 01:21:07	-122.13	26745	051 01:27:03	-89.82	17794	051 00:31:50	-158.79	7243			
051 03:03:09	-147.64	26746	051 03:08:18	-115.14	17795	051 02:13:57	175.67	7244			
051 04:45:11	-173.14	26747	051 04:49:32	-140.44	17796	051 03:56:03	150.15	7245			
051 06:27:13	161.35	26748	051 06:30:47	-165.76	17797	051 05:38:09	124.63	7246			
051 08:09:15	135.84	26749	051 08:12:01	168.94	17798	051 07:20:16	99.10	7247			
051 09:51:16	110.35	26750	051 09:53:16	143.62	17799	051 09:02:22	73.58	7248			
051 11:33:18	84.84	26751	051 11:34:31	118.30	17800	051 10:44:28	48.05	7249			
051 13:15:20	59.33	26752	051 13:15:45	93.00	17801	051 12:26:35	22.52	7250			
051 14:57:22	33.82	26753	051 14:57:00	67.68	17802	051 14:08:41	-3.00	7251			
051 16:39:24	8.32	26754	051 16:38:14	42.38	17803	051 15:50:47	-28.52	7252			
051 18:21:26	-17.19	26755	051 18:19:29	17.06	17804	051 17:32:54	-54.06	7253			
051 20:03:27	-42.68	26756	051 20:00:44	-8.25	17805	051 19:15:00	-79.58	7254			
051 21:45:29	-68.19	26757	051 21:41:58	-33.56	17806	051 20:57:06	-105.10	7255			
051 23:27:31	-93.70	26758	051 23:23:13	-58.87	17807	051 22:39:13	-130.63	7256			
052 01:09:33	-119.21	26759	052 01:04:27	-84.18	17808	052 00:21:19	-156.16	7257			
052 02:51:35	-144.72	26760	052 02:45:42	-109.49	17809	052 02:03:25	178.32	7258			
052 04:33:36	-170.21	26761	052 04:26:57	-134.81	17810	052 03:45:32	152.79	7259			
052 06:15:38	164.28	26762	052 06:08:11	-160.11	17811	052 05:27:38	127.27	7260			
052 07:57:40	138.78	26763	052 07:49:26	174.57	17812	052 07:09:44	101.75	7261			
052 09:39:42	113.27	26764	052 09:30:40	149.27	17813	052 08:51:51	76.21	7262			
052 11:21:44	87.76	26765	052 11:11:55	123.95	17814	052 10:33:57	50.69	7263			
052 13:03:46	62.25	26766	052 12:53:10	98.63	17815	052 12:16:03	25.17	7264			
052 14:45:47	36.76	26767	052 14:34:24	73.33	17816	052 13:58:10	-.37	7265			
052 16:27:49	11.25	26768	052 16:15:39	48.01	17817	052 15:40:16	-25.89	7266			
052 18:09:51	-14.26	26769	052 17:56:53	22.71	17818	052 17:22:22	-51.41	7267			
052 19:51:53	-39.76	26770	052 19:38:08	-2.61	17819	052 19:04:29	-76.94	7268			
052 21:33:55	-65.27	26771	052 21:19:23	-27.92	17820	052 20:46:35	-102.46	7269			
052 23:15:57	-90.78	26772	052 23:00:37	-53.23	17821	052 22:28:41	-127.99	7270			
053 00:57:58	-116.27	26773	053 00:41:52	-78.54	17822	053 00:10:48	-153.52	7271			
053 02:40:00	-141.78	26774	053 02:23:06	-103.84	17823	053 01:52:54	-179.04	7272			
053 04:22:02	-167.29	26775	053 04:04:21	-129.16	17824	053 03:35:00	155.44	7273			
053 06:04:04	167.20	26776	053 05:45:36	-154.48	17825	053 05:17:07	129.90	7274			
053 07:46:06	141.70	26777	053 07:26:50	-179.78	17826	053 06:59:13	104.38	7275			
053 09:28:07	116.20	26778	053 09:08:05	154.90	17827	053 08:41:19	78.86	7276			
053 11:10:09	90.69	26779	053 10:49:19	129.60	17828	053 10:23:26	53.33	7277			
053 12:52:11	65.19	26780	053 12:30:34	104.28	17829	053 12:05:32	27.80	7278			
053 14:34:13	39.68	26781	053 14:11:49	78.97	17830	053 13:47:38	2.28	7279			
053 16:16:15	14.17	26782	053 15:53:03	53.66	17831	053 15:29:45	-23.25	7280			
053 17:58:17	-11.34	26783	053 17:34:18	28.35	17832	053 17:11:51	-48.77	7281			
053 19:40:18	-36.83	26784	053 19:15:32	3.04	17833	053 18:53:57	-74.29	7282			
053 21:22:20	-62.34	26785	053 20:56:47	-22.27	17834	053 20:36:04	-99.83	7283			
053 23:04:22	-87.84	26786	053 22:38:02	-47.59	17835	053 22:18:10	-125.35	7284			
054 00:46:24	-113.35	26787	054 00:19:16	-72.89	17836	054 00:00:16	-150.87	7285			
054 02:28:26	-138.86	26788	054 02:00:31	-98.21	17837	054 01:42:23	-176.41	7286			
054 04:10:27	-164.35	26789	054 03:41:45	-123.51	17838	054 03:24:29	158.07	7287			
054 05:52:29	170.14	26790	054 05:23:00	-148.83	17839	054 05:06:35	132.55	7288			
054 07:34:31	144.63	26791	054 07:04:15	-174.15	17840	054 06:48:42	107.02	7289			
054 09:16:33	119.12	26792	054 08:45:29	160.55	17841	054 08:30:48	81.50	7290			
054 10:58:35	93.62	26793	054 10:26:44	135.23	17842	054 10:12:54	55.97	7291			
054 12:40:37	68.11	26794	054 12:07:58	109.93	17843	054 11:55:01	30.44	7292			
054 14:22:38	42.61	26795	054 13:49:13	84.61	17844	054 13:37:07	4.92	7293			
054 16:04:40	17.11	26796	054 15:30:28	59.30	17845	054 15:19:13	-20.60	7294			
054 17:46:42	-8.40	26797	054 17:11:42	33.99	17846	054 17:01:20	-46.14	7295			
054 19:28:44	-33.91	26798	054 18:52:57	8.68	17847	054 18:43:26	-71.66	7296			
054 21:10:46	-59.42	26799	054 20:34:11	-16.63	17848	054 20:25:32	-97.18	7297			
054 22:52:48	-84.92	26800	054 22:15:26	-41.94	17849	054 22:07:39	-122.72	7298			
			054 23:56:41	-67.26	17850	054 23:49:45	-148.24	7299			

**SATELLITE C2**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

055 00:55:56	-72.04	34714
055 02:40:48	-98.39	34715
055 04:25:40	-124.73	34716
055 06:10:32	-151.07	34717
055 07:55:24	-177.41	34718
055 09:40:16	156.24	34719
055 11:25:08	129.90	34720
055 13:10:00	103.56	34721
055 14:54:52	77.22	34722
055 16:39:44	50.87	34723
055 18:24:36	24.53	34724
055 20:09:29	-1.81	34725
055 21:54:21	-28.15	34726
055 23:39:13	-54.49	34727

**SATELLITE C3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

055 01:33:11	-31.32	28454
055 03:18:06	-57.68	28455
055 05:03:02	-84.03	28456
055 06:47:57	-110.39	28457
055 08:32:52	-136.74	28458
055 10:17:47	-163.10	28459
055 12:02:42	170.54	28460
055 13:47:37	144.19	28461
055 15:32:32	117.83	28462
055 17:16:27	91.48	28463
055 19:02:23	65.12	28464
055 20:47:18	38.77	28465
055 22:32:13	12.41	28466

**SATELLITE C4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

055 01:10:54	-162.90	3219
055 02:55:48	170.75	3220
055 04:40:42	144.40	3221
055 06:25:36	118.05	3222
055 08:10:30	91.70	3223
055 09:55:24	65.35	3224
055 11:40:18	39.00	3225
055 13:25:12	12.65	3226
055 15:10:06	-13.70	3227
055 16:55:00	-40.05	3228
055 18:39:54	-66.40	3229
055 20:24:48	-92.75	3230
055 22:09:42	-119.10	3231
055 23:54:36	-145.45	3232

056 01:24:05	-80.84	34728
056 03:08:57	-107.18	34729
056 04:53:49	-133.52	34730
056 06:38:41	-159.86	34731
056 08:23:33	173.79	34732
056 10:08:25	147.45	34733
056 11:53:17	121.11	34734
056 13:38:09	94.77	34735
056 15:23:01	68.42	34736
056 17:07:53	42.08	34737
056 18:52:45	15.74	34738
056 20:37:37	-10.60	34739
056 22:22:29	-36.95	34740

056 00:17:08	-13.94	28467
056 02:02:03	-40.30	28468
056 03:46:58	-66.65	28469
056 05:31:53	-93.01	28470
056 07:16:49	-119.36	28471
056 09:01:44	-145.72	28472
056 10:46:39	-172.07	28473
056 12:31:34	161.57	28474
056 14:16:29	135.22	28475
056 16:01:24	108.86	28476
056 17:46:19	82.50	28477
056 19:31:15	56.15	28478
056 21:16:10	29.80	28479
056 23:01:05	3.44	28480

056 01:39:30	-171.80	3233
056 03:24:24	161.85	3234
056 05:09:18	135.49	3235
056 06:54:12	109.14	3236
056 08:39:06	82.79	3237
056 10:24:00	56.44	3238
056 12:08:54	30.09	3239
056 13:53:48	3.74	3240
056 15:38:42	-22.61	3241
056 17:23:36	-48.96	3242
056 19:08:30	-75.31	3243
056 20:53:24	-101.66	3244
056 22:38:18	-128.01	3245

057 00:07:21	-63.29	34741
057 01:52:13	-89.63	34742
057 03:37:05	-115.97	34743
057 05:21:57	-142.32	34744
057 07:06:49	-168.66	34745
057 08:51:41	165.00	34746
057 10:36:33	138.66	34747
057 12:21:25	112.31	34748
057 14:06:17	85.97	34749
057 15:51:09	59.63	34750
057 17:36:01	33.29	34751
057 19:20:53	6.94	34752
057 21:05:45	-19.40	34753
057 22:50:37	-45.74	34754

057 00:46:00	-22.92	28481
057 02:30:55	-49.27	28482
057 04:15:50	-75.63	28483
057 06:00:45	-101.98	28484
057 07:45:40	-128.34	28485
057 09:30:36	-154.69	28486
057 11:15:31	178.95	28487
057 13:00:26	152.60	28488
057 14:45:21	126.24	28489
057 16:30:16	99.89	28490
057 18:15:11	73.53	28491
057 20:00:06	47.18	28492
057 21:45:02	20.82	28493
057 23:29:57	-5.53	28494

057 00:23:12	-154.36	3246
057 02:08:06	179.29	3247
057 03:53:00	152.94	3248
057 05:37:54	126.59	3249
057 07:22:47	100.24	3250
057 09:07:41	73.89	3251
057 10:52:35	47.54	3252
057 12:37:29	21.19	3253
057 14:22:23	-5.16	3254
057 16:07:17	-31.51	3255
057 17:52:11	-57.86	3256
057 19:37:05	-84.21	3257
057 21:21:59	-110.56	3258
057 23:06:53	-136.91	3259

058 00:35:29	-72.08	34755
058 02:20:21	-98.43	34756
058 04:05:13	-124.77	34757
058 05:50:05	-151.11	34758
058 07:34:57	-177.45	34759
058 09:19:49	156.20	34760
058 11:04:41	129.86	34761
058 12:49:33	103.52	34762
058 14:34:25	77.18	34763
058 16:19:17	50.83	34764
058 18:04:09	24.49	34765
058 19:49:02	-1.85	34766
058 21:33:54	-28.19	34767
058 23:18:46	-54.53	34768

058 01:14:52	-31.89	28495
058 02:59:47	-58.24	28496
058 04:44:42	-84.60	28497
058 06:29:37	-110.96	28498
058 08:14:32	-137.31	28499
058 09:59:27	-163.67	28500
058 11:44:23	169.98	28501
058 13:29:18	143.62	28502
058 15:14:13	117.27	28503
058 16:59:08	90.91	28504
058 18:44:03	64.56	28505
058 20:28:58	38.20	28506
058 22:13:53	11.85	28507
058 23:58:49	-14.51	28508

058 00:51:47	-163.27	3260
058 02:36:41	170.38	3261
058 04:21:35	144.03	3262
058 06:06:29	117.68	3263
058 07:51:23	91.33	3264
058 09:36:17	64.98	3265
058 11:21:11	38.63	3266
058 13:06:05	12.28	3267
058 14:50:59	-14.07	3268
058 16:35:53	-40.42	3269
058 18:20:47	-66.77	3270
058 20:05:41	-93.12	3271
058 21:50:35	-119.47	3272
058 23:35:29	-145.82	3273

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT	
day hr mn sc	deg dg			day hr mn sc	deg dg			day hr mn sc	deg dg		
055 00:34:49	-110.42	26801		055 01:37:55	-92.56	17851		055 01:31:51	-173.76	7300	
055 02:16:51	-135.93	26802		055 03:19:10	-117.88	17852		055 03:13:58	160.71	7301	
055 03:58:53	-161.43	26803		055 05:00:24	-143.18	17853		055 04:56:04	135.19	7302	
055 05:40:55	173.06	26804		055 06:41:39	-168.50	17854		055 06:38:10	109.67	7303	
055 07:22:57	147.55	26805		055 08:22:54	166.19	17855		055 08:20:17	84.13	7304	
055 09:04:58	122.06	26806		055 10:04:08	140.88	17856		055 10:02:23	58.61	7305	
055 10:47:00	96.55	26807		055 11:45:23	115.57	17857		055 11:44:29	33.09	7306	
055 12:29:02	71.04	26808		055 13:26:37	90.26	17858		055 13:26:36	7.55	7307	
055 14:11:04	45.53	26809		055 15:07:52	64.95	17859		055 15:08:42	-17.97	7308	
055 15:53:06	20.03	26810		055 16:49:07	39.63	17860		055 16:50:48	-43.49	7309	
055 17:35:08	-5.48	26811		055 18:30:21	14.33	17861		055 18:32:55	-69.02	7310	
055 19:17:09	-30.97	26812		055 20:11:36	-10.99	17862		055 20:15:01	-94.54	7311	
055 20:59:11	-56.48	26813		055 21:52:50	-36.29	17863		055 21:57:07	-120.07	7312	
055 22:41:13	-81.99	26814		055 23:34:05	-61.61	17864		055 23:39:14	-145.60	7313	
056 00:23:15	-107.50	26815		056 01:15:20	-86.93	17865		056 01:21:20	-171.12	7314	
056 02:05:17	-133.00	26816		056 02:56:34	-112.23	17866		056 03:03:26	163.36	7315	
056 03:47:19	-158.51	26817		056 04:37:49	-137.55	17867		056 04:45:33	137.82	7316	
056 05:29:20	175.99	26818		056 06:19:03	-162.85	17868		056 06:27:39	112.30	7317	
056 07:11:22	150.49	26819		056 08:00:18	171.83	17869		056 08:09:45	86.78	7318	
056 08:53:24	124.98	26820		056 09:41:33	146.52	17870		056 09:51:52	61.24	7319	
056 10:35:26	99.47	26821		056 11:22:47	121.21	17871		056 11:33:58	35.72	7320	
056 12:17:28	73.96	26822		056 13:04:02	95.90	17872		056 13:16:04	10.20	7321	
056 13:59:29	48.47	26823		056 14:45:16	70.59	17873		056 14:58:11	-15.33	7322	
056 15:41:31	22.96	26824		056 16:26:31	45.28	17874		056 16:40:17	-40.85	7323	
056 17:23:33	-2.55	26825		056 18:07:46	19.96	17875		056 18:22:23	-66.37	7324	
056 19:05:35	-28.05	26826		056 19:49:00	-5.34	17876		056 20:04:30	-91.91	7325	
056 20:47:37	-53.56	26827		056 21:30:15	-30.66	17877		056 21:46:36	-117.43	7326	
056 22:29:39	-79.07	26828		056 23:11:29	-55.96	17878		056 23:28:42	-142.95	7327	
057 00:11:40	-104.56	26829		057 00:52:44	-81.28	17879		057 01:10:49	-168.49	7328	
057 01:53:42	-130.07	26830		057 02:33:59	-106.59	17880		057 02:52:55	165.99	7329	
057 03:35:44	-155.58	26831		057 04:15:13	-131.90	17881		057 04:35:01	140.47	7330	
057 05:17:46	178.91	26832		057 05:56:28	-157.21	17882		057 06:17:08	114.94	7331	
057 06:59:48	153.41	26833		057 07:37:42	177.48	17883		057 07:59:14	89.41	7332	
057 08:41:50	127.90	26834		057 09:18:57	152.17	17884		057 09:41:20	63.89	7333	
057 10:23:51	102.41	26835		057 11:00:12	126.85	17885		057 11:23:27	38.36	7334	
057 12:05:53	76.90	26836		057 12:41:26	101.55	17886		057 13:05:33	12.84	7335	
057 13:47:55	51.39	26837		057 14:22:41	76.23	17887		057 14:47:39	-12.68	7336	
057 15:29:57	25.88	26838		057 16:03:55	50.93	17888		057 16:29:46	-38.22	7337	
057 17:11:59	.38	26839		057 17:45:10	25.61	17889		057 18:11:52	-63.74	7338	
057 18:54:00	-25.12	26840		057 19:26:25	.29	17890		057 19:53:58	-89.26	7339	
057 20:36:02	-50.63	26841		057 21:07:39	-25.01	17891		057 21:36:05	-114.80	7340	
057 22:18:04	-76.13	26842		057 22:48:54	-50.33	17892		057 23:18:11	-140.32	7341	
058 00:00:06	-101.64	26843		058 00:30:08	-75.63	17893		058 01:00:17	-165.84	7342	
058 01:42:08	-127.15	26844		058 02:11:23	-100.95	17894		058 02:42:24	168.63	7343	
058 03:24:10	-152.66	26845		058 03:52:38	-126.26	17895		058 04:24:30	143.11	7344	
058 05:06:11	-178.15	26846		058 05:33:52	-151.57	17896		058 06:06:36	117.59	7345	
058 06:48:13	156.34	26847		058 07:15:07	-176.88	17897		058 07:48:43	92.05	7346	
058 08:30:15	130.83	26848		058 08:56:21	157.81	17898		058 09:30:49	66.53	7347	
058 10:12:17	105.33	26849		058 10:37:36	132.50	17899		058 11:12:55	41.01	7348	
058 11:54:19	79.82	26850		058 12:18:51	107.18	17900		058 12:55:02	15.47	7349	
058 13:36:21	54.31	26851		058 14:00:05	81.88	17901		058 14:37:08	-10.05	7350	
058 15:18:22	28.82	26852		058 15:41:20	56.56	17902		058 16:19:14	-35.57	7351	
058 17:00:24	3.31	26853		058 17:22:34	31.26	17903		058 18:01:21	-61.10	7352	
058 18:42:26	-22.20	26854		058 19:03:49	5.94	17904		058 19:43:27	-86.62	7353	
058 20:24:28	-47.71	26855		058 20:45:04	-19.37	17905		058 21:25:33	-112.15	7354	
058 22:06:30	-73.21	26856		058 22:26:18	-44.68	17906		058 23:07:40	-137.68	7355	
058 23:48:32	-98.72	26857									

**SATELLITE C2**  
**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

059 01:03:38	-80.88	34769
059 02:48:30	-107.22	34770
059 04:33:22	-133.56	34771
059 06:18:14	-159.90	34772
059 08:03:06	173.75	34773
059 09:47:58	147.41	34774
059 11:32:50	121.07	34775
059 13:17:42	94.73	34776
059 15:02:34	68.39	34777
059 16:47:26	42.04	34778
059 18:32:18	15.70	34779
059 20:17:10	-10.64	34780
059 22:02:02	-36.98	34781
059 23:46:54	-63.33	34782

**SATELLITE C3**  
**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

059 01:43:44	-40.86	28509
059 03:28:39	-67.22	28510
059 05:13:34	-93.57	28511
059 06:58:29	-119.93	28512
059 08:43:24	-146.28	28513
059 10:28:19	-172.64	28514
059 12:13:15	161.01	28515
059 13:58:10	134.65	28516
059 15:43:05	108.30	28517
059 17:28:00	81.94	28518
059 19:12:55	55.58	28519
059 20:57:50	29.23	28520
059 22:42:45	2.87	28521

**SATELLITE C4**  
**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

059 01:20:23	-172.17	3274
059 03:05:17	161.48	3275
059 04:50:11	135.13	3276
059 06:35:05	108.78	3277
059 08:19:59	82.43	3278
059 10:04:53	56.08	3279
059 11:49:47	29.73	3280
059 13:34:41	3.38	3281
059 15:19:35	-22.97	3282
059 17:04:29	-49.32	3283
059 18:49:23	-75.67	3284
059 20:34:17	-102.02	3285
059 22:19:11	-128.37	3286

060 01:31:46	-89.67	34783
060 03:16:38	-116.01	34784
060 05:01:30	-142.35	34785
060 06:46:22	-168.70	34786
060 08:31:14	164.96	34787
060 10:16:06	138.62	34788
060 12:00:58	112.28	34789
060 13:45:50	85.93	34790
060 15:30:42	59.59	34791
060 17:15:34	33.25	34792
060 19:00:26	6.91	34793
060 20:45:18	-19.44	34794
060 22:30:10	-45.78	34795

060 00:27:41	-23.48	28522
060 02:12:36	-49.84	28523
060 03:57:31	-76.19	28524
060 05:42:26	-102.55	28525
060 07:27:21	-128.90	28526
060 09:12:16	-155.26	28527
060 10:57:11	178.39	28528
060 12:42:06	152.03	28529
060 14:27:02	125.68	28530
060 16:11:57	99.32	28531
060 17:56:52	72.97	28532
060 19:41:47	46.61	28533
060 21:26:42	20.25	28534
060 23:11:37	-6.10	28535

060 00:04:05	-154.72	3287
060 01:48:59	178.93	3288
060 03:33:53	152.58	3289
060 05:18:46	126.22	3290
060 07:03:40	99.87	3291
060 08:48:34	73.52	3292
060 10:33:28	47.17	3293
060 12:18:22	20.82	3294
060 14:03:16	-5.53	3295
060 15:48:10	-31.88	3296
060 17:33:04	-58.23	3297
060 19:17:58	-84.58	3298
060 21:02:52	-110.93	3299
060 22:47:46	-137.28	3300

061 00:15:02	-72.12	34796
061 01:59:54	-98.46	34797
061 03:44:46	-124.81	34798
061 05:29:38	-151.15	34799
061 07:14:30	-177.49	34800
061 08:59:22	156.17	34801
061 10:44:14	129.82	34802
061 12:29:06	103.48	34803
061 14:13:58	77.14	34804
061 15:58:50	50.80	34805
061 17:43:42	24.45	34806
061 19:28:34	-1.89	34807
061 21:13:26	-28.23	34808
061 22:58:18	-54.57	34809

061 00:56:32	-32.46	28536
061 02:41:28	-58.81	28537
061 04:26:23	-85.17	28538
061 06:11:18	-111.52	28539
061 07:56:13	-137.88	28540
061 09:41:08	-164.23	28541
061 11:26:03	169.41	28542
061 13:10:58	143.06	28543
061 14:55:54	116.70	28544
061 16:40:49	90.35	28545
061 18:25:44	63.99	28546
061 20:10:39	37.64	28547
061 21:55:34	11.28	28548
061 23:40:29	-15.07	28549

061 00:32:40	-163.63	3301
061 02:17:34	170.02	3302
061 04:02:28	143.67	3303
061 05:47:22	117.32	3304
061 07:32:16	90.97	3305
061 09:17:10	64.62	3306
061 11:02:04	38.27	3307
061 12:46:58	11.92	3308
061 14:31:52	-14.43	3309
061 16:16:46	-40.78	3310
061 18:01:40	-67.13	3311
061 19:46:34	-93.48	3312
061 21:31:28	-119.83	3313
061 23:16:22	-146.18	3314

062 00:43:10	-80.92	34810
062 02:28:02	-107.26	34811
062 04:12:54	-133.60	34812
062 05:57:46	-159.94	34813
062 07:42:38	173.71	34814
062 09:27:31	147.37	34815
062 11:12:23	121.03	34816
062 12:57:15	94.69	34817
062 14:42:07	68.35	34818
062 16:26:59	42.01	34819
062 18:11:51	15.66	34820
062 19:56:43	-10.68	34821
062 21:41:35	-37.02	34822
062 23:26:27	-63.36	34823

062 01:25:24	-41.43	28550
062 03:10:20	-67.78	28551
062 04:55:15	-94.14	28552
062 06:40:10	-120.49	28553
062 08:25:05	-146.85	28554
062 10:10:00	-173.21	28555
062 11:54:55	160.44	28556
062 13:39:50	134.08	28557
062 15:24:46	107.73	28558
062 17:09:41	81.37	28559
062 18:54:36	55.02	28560
062 20:39:31	28.66	28561
062 22:24:26	2.31	28562

062 01:01:16	-172.53	3315
062 02:46:10	161.12	3316
062 04:31:04	134.77	3317
062 06:15:58	108.41	3318
062 08:00:52	82.06	3319
062 09:45:46	55.71	3320
062 11:30:40	29.36	3321
062 13:15:34	3.01	3322
062 15:00:28	-23.34	3323
062 16:45:22	-49.69	3324
062 18:30:16	-76.04	3325
062 20:15:10	-102.39	3326
062 22:00:04	-128.74	3327
062 23:44:58	-155.09	3328

SATELLITE S2							SATELLITE S3							SATELLITE S4							
Ascending Node Predictions							Ascending Node Predictions							Ascending Node Predictions							
Predicting for 182 days							Predicting for 183 days							Predicting for 183 days							
TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	day	hr	mn	sc	deg	day	hr	mn	sc	deg	dg	day	
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc
059 01:30:33	-124.21	26858	059 00:07:33	-69.99	17907	059 00:49:46	-163.20	7356						059 02:31:52	171.28	7357					
059 03:12:35	-149.72	26859	059 01:48:47	-95.30	17908	059 04:13:59	145.74	7358						059 05:56:05	120.22	7359					
059 04:54:37	-175.23	26860	059 03:30:02	-120.61	17909	059 07:38:11	94.70	7360						059 09:20:18	69.16	7361					
059 06:36:39	159.26	26861	059 05:11:17	-145.93	17910	059 11:02:24	43.64	7362						059 12:44:30	18.12	7363					
059 08:18:41	133.76	26862	059 06:52:31	-171.23	17911	059 14:26:37	-7.41	7364						059 16:08:43	-32.93	7365					
059 10:00:42	108.26	26863	059 08:33:46	163.45	17912	059 17:50:49	-58.45	7366						059 19:32:56	-83.99	7367					
059 11:42:44	82.75	26864	059 10:15:00	138.15	17913	059 21:15:02	-109.51	7368						059 22:57:08	-135.03	7369					
059 13:24:46	57.25	26865	059 11:56:15	112.83	17914																
059 15:06:48	31.74	26866	059 13:37:30	87.51	17915																
059 16:48:50	6.23	26867	059 15:18:44	62.21	17916																
059 18:30:52	-19.28	26868	059 16:59:59	36.89	17917																
059 20:12:53	-44.77	26869	059 18:41:13	11.59	17918																
059 21:54:55	-70.28	26870	059 20:22:28	-13.73	17919																
059 23:36:57	-95.79	26871	059 22:03:43	-39.04	17920																
			059 23:44:57	-64.35	17921																
060 01:18:59	-121.29	26872	060 01:26:12	-89.66	17922	060 00:39:15	-160.57	7370						060 02:21:21	173.91	7371					
060 03:01:01	-146.80	26873	060 03:07:26	-114.97	17923	060 04:03:27	148.39	7372						060 05:45:34	122.86	7373					
060 04:43:03	-172.31	26874	060 04:48:41	-140.28	17924	060 07:27:40	97.34	7374						060 09:09:46	71.81	7375					
060 06:25:04	162.20	26875	060 06:29:56	-165.60	17925	060 10:51:53	46.28	7376						060 12:33:59	20.76	7377					
060 08:07:06	136.69	26876	060 08:11:10	169.10	17926	060 14:16:05	-4.76	7378						060 15:58:12	-30.30	7379					
060 09:49:08	111.18	26877	060 09:52:25	143.78	17927	060 17:40:18	-55.82	7380						060 19:22:24	-81.34	7381					
060 11:31:10	85.67	26878	060 11:33:39	118.48	17928	060 21:04:31	-106.87	7382						060 22:46:37	-132.40	7383					
060 13:13:12	60.17	26879	060 13:14:54	93.16	17929																
060 14:55:13	34.67	26880	060 14:56:09	67.85	17930																
060 16:37:15	9.17	26881	060 16:37:23	42.54	17931																
060 18:19:17	-16.34	26882	060 18:18:38	17.23	17932																
060 20:01:19	-41.85	26883	060 19:59:53	-8.09	17933																
060 21:43:21	-67.36	26884	060 21:41:07	-33.39	17934																
060 23:25:23	-92.86	26885	060 23:22:22	-58.71	17935																
061 01:07:24	-118.36	26886	061 01:03:36	-84.01	17936	061 00:28:43	-157.92	7384						061 02:10:50	176.55	7385					
061 02:49:26	-143.87	26887	061 02:44:51	-109.33	17937	061 03:52:56	151.03	7386						061 05:35:02	125.51	7387					
061 04:31:28	-169.37	26888	061 04:26:06	-134.65	17938	061 07:17:09	99.97	7388						061 08:59:15	74.45	7389					
061 06:13:30	165.12	26889	061 06:07:20	-159.95	17939	061 10:41:21	48.93	7390						061 12:23:28	23.39	7391					
061 07:55:32	139.61	26890	061 07:48:35	174.73	17940	061 14:05:34	-2.13	7392						061 15:47:40	-27.65	7393					
061 09:37:34	114.10	26891	061 09:29:49	149.43	17941	061 17:29:47	-53.18	7394						061 19:11:53	-78.70	7395					
061 11:19:35	88.61	26892	061 11:11:04	124.11	17942	061 20:53:59	-104.23	7396						061 22:36:06	-129.76	7397					
061 13:01:37	63.10	26893	061 12:52:19	98.80	17943																
061 14:43:39	37.59	26894	061 14:33:33	73.49	17944																
061 16:25:41	12.09	26895	061 16:14:48	48.18	17945																
061 18:07:43	-13.42	26896	061 17:56:02	22.87	17946																
061 19:49:45	-38.93	26897	061 19:37:17	-2.44	17947																
061 21:31:46	-64.92	26898	061 21:18:32	-27.76	17948																
061 23:13:48	-89.93	26899	061 22:59:46	-53.06	17949																
062 00:55:50	-115.44	26900	062 00:41:01	-78.38	17950	062 00:18:12	-155.28	7398						062 02:00:18	179.20	7399					
062 02:37:52	-140.94	26901	062 02:22:15	-103.68	17951	062 03:42:25	153.66	7400						062 05:24:31	128.14	7401					
062 04:19:54	-166.45	26902	062 04:03:30	-129.00	17952	062 07:06:37	102.62	7402						062 08:48:44	77.09	7403					
062 06:01:55	168.05	26903	062 05:44:45	-154.31	17953	062 10:30:50	51.56	7404						062 12:12:56	26.04	7405					
062 07:43:57	142.55	26904	062 07:25:59	-179.62	17954	062 13:55:03	1.51	7406						062 15:37:09	-25.01	7407					
062 09:25:59	117.04	26905	062 09:07:14	155.07	17955																
062 11:08:01	91.53	26906	062 10:48:28	129.76	17956																
062 12:50:03	66.02	26907	062 12:29:43	104.45	17957																
062 14:32:05	40.52	26908	062 14:10:58	79.13	17958																
062 16:14:06	15.02	26909	062 15:52:12	53.83	17959																
062 17:56:08	-10.49	26910	062 17:33:27	28.51	17960																
062 19:38:10	-35.99	26911	062 19:14:41	3.21	17961																
062 21:20:12	-61.50	26912	062 20:55:56	-22.11	17962																
062 23:02:14	-87.01	26913	062 22:37:11	-47.43	17963																

SATELLITE C2				SATELLITE C3				SATELLITE C4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 183 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	day	hr mn sc	deg dg
day	hr mn sc	deg dg	day	hr mn sc	deg dg	day	hr mn sc	deg dg	day	hr mn sc	deg dg
063 01:11:19	-89.71	34824	063 00:09:21	-24.05	28563	063 01:29:52	178.56	3329			
063 02:56:11	-116.05	34825	063 01:54:16	-50.40	28564	063 03:14:46	152.21	3330			
063 04:41:03	-142.39	34826	063 03:39:12	-76.76	28565	063 04:59:40	125.86	3331			
063 06:25:55	-168.73	34827	063 05:24:07	-103.11	28566	063 06:44:34	99.51	3332			
063 08:10:47	164.92	34828	063 07:09:02	-129.47	28567	063 08:29:27	73.16	3333			
063 09:55:39	138.58	34829	063 08:53:57	-155.82	28568	063 10:14:21	46.81	3334			
063 11:40:31	112.24	34830	063 10:38:52	177.82	28569	063 11:59:15	20.46	3335			
063 13:25:23	85.90	34831	063 12:23:47	151.46	28570	063 13:44:09	-5.89	3336			
063 15:10:15	59.55	34832	063 14:08:42	125.11	28571	063 15:29:03	-32.24	3337			
063 16:55:07	33.21	34833	063 15:53:37	98.75	28572	063 17:13:57	-58.59	3338			
063 18:39:59	6.87	34834	063 17:38:33	72.40	28573	063 18:58:51	-84.94	3339			
063 20:24:51	-19.47	34835	063 19:23:28	46.04	28574	063 20:43:45	-111.29	3340			
063 22:09:43	-45.82	34836	063 21:08:23	19.69	28575	063 22:28:39	-137.65	3341			
063 23:54:35	-72.16	34837	063 22:53:18	-6.67	28576						
064 01:39:27	-98.50	34838	064 00:38:13	-33.02	28577	064 00:13:33	-164.00	3342			
064 03:24:19	-124.84	34839	064 02:23:08	-59.38	28578	064 01:58:27	169.65	3343			
064 05:09:11	-151.19	34840	064 04:08:03	-85.73	28579	064 03:43:21	143.30	3344			
064 06:54:03	-177.53	34841	064 05:52:59	-112.09	28580	064 05:28:15	116.95	3345			
064 08:38:55	156.13	34842	064 07:37:54	-138.44	28581	064 07:13:09	90.60	3346			
064 10:23:47	129.79	34843	064 09:22:49	-164.80	28582	064 08:58:03	64.25	3347			
064 12:08:39	103.44	34844	064 11:07:44	168.85	28583	064 10:42:57	37.90	3348			
064 13:53:31	77.10	34845	064 12:52:39	142.49	28584	064 12:27:51	11.55	3349			
064 15:38:23	50.76	34846	064 14:37:34	116.13	28585	064 14:12:45	-14.80	3350			
064 17:23:15	24.42	34847	064 16:22:29	89.78	28586	064 15:57:39	-41.15	3351			
064 19:08:07	-1.93	34848	064 18:07:25	63.43	28587	064 17:42:33	-67.50	3352			
064 20:52:59	-28.27	34849	064 19:52:20	37.07	28588	064 19:27:27	-93.85	3353			
064 22:37:51	-54.61	34850	064 21:37:15	10.71	28589	064 21:12:21	-120.20	3354			
			064 23:22:10	-15.64	28590	064 22:57:15	-146.55	3355			
065 00:22:43	-80.95	34851	065 01:07:05	-42.00	28591	065 00:42:09	-172.90	3356			
065 02:07:35	-107.30	34852	065 02:52:00	-68.35	28592	065 02:27:03	160.75	3357			
065 03:52:27	-133.64	34853	065 04:36:55	-94.71	28593	065 04:11:57	134.40	3358			
065 05:37:19	-159.98	34854	065 06:21:51	-121.06	28594	065 05:56:51	108.05	3359			
065 07:22:11	173.68	34855	065 08:06:46	-147.42	28595	065 07:41:45	81.70	3360			
065 09:07:03	147.34	34856	065 09:51:41	-173.77	28596	065 09:26:39	55.35	3361			
065 10:51:55	120.99	34857	065 11:36:36	159.87	28597	065 11:11:33	29.00	3362			
065 12:36:47	94.65	34858	065 13:21:31	133.52	28598	065 12:56:27	2.65	3363			
065 14:21:39	68.31	34859	065 15:06:26	107.16	28599	065 14:41:21	-23.70	3364			
065 16:06:31	41.97	34860	065 16:51:21	80.80	28600	065 16:26:15	-50.05	3365			
065 17:51:23	15.62	34861	065 18:36:17	54.45	28601	065 18:11:09	-76.40	3366			
065 19:36:15	-10.72	34862	065 20:21:12	28.10	28602	065 19:56:03	-102.75	3367			
065 21:21:07	-37.06	34863	065 22:06:07	1.74	28603	065 21:40:57	-129.10	3368			
065 23:05:59	-63.40	34864	065 23:51:02	-24.62	28604	065 23:25:51	-155.45	3369			
066 00:50:51	-89.75	34865	066 01:35:57	-50.97	28605	066 01:10:45	178.20	3370			
066 02:35:43	-116.09	34866	066 03:20:52	-77.33	28606	066 02:55:39	151.85	3371			
066 04:20:35	-142.43	34867	066 05:05:47	-103.68	28607	066 04:40:33	125.49	3372			
066 06:05:27	-168.77	34868	066 06:50:43	-130.04	28608	066 06:25:27	99.14	3373			
066 07:50:19	164.88	34869	066 08:35:38	-156.39	28609	066 08:10:21	72.79	3374			
066 09:35:11	138.54	34870	066 10:20:33	177.25	28610	066 09:55:15	46.44	3375			
066 11:20:03	112.20	34871	066 12:05:28	150.90	28611	066 11:40:09	20.09	3376			
066 13:04:55	85.86	34872	066 13:50:23	124.54	28612	066 13:25:03	-6.26	3377			
066 14:49:47	59.51	34873	066 15:35:18	98.19	28613	066 15:09:57	-32.61	3378			
066 16:34:39	33.17	34874	066 17:20:13	71.83	28614	066 16:54:51	-58.96	3379			
066 18:19:31	6.83	34875	066 19:05:09	45.48	28615	066 18:39:44	-85.31	3380			
066 20:04:23	-19.51	34876	066 20:50:04	19.12	28616	066 20:24:38	-111.66	3381			
066 21:49:15	-45.86	34877	066 22:34:59	-7.23	28617	066 22:09:32	-138.01	3382			
066 23:34:07	-72.20	34878				066 23:54:26	-164.36	3383			

**SATELLITE S2**

**Ascending Node Predictions**  
**Predicting for 182 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

063 00:44:16	-112.52	26914
063 02:26:17	-138.01	26915
063 04:08:19	-163.52	26916
063 05:50:21	170.97	26917
063 07:32:23	145.47	26918
063 09:14:25	119.96	26919
063 10:56:27	94.45	26920
063 12:38:28	68.96	26921
063 14:20:30	43.45	26922
063 16:02:32	17.94	26923
063 17:44:34	-7.56	26924
063 19:26:36	-33.07	26925
063 21:08:37	-58.57	26926
063 22:50:39	-84.07	26927

**SATELLITE S3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

063 00:18:25	-72.73	17964
063 01:59:40	-98.05	17965
063 03:40:54	-123.35	17966
063 05:22:09	-148.67	17967
063 07:03:24	-173.98	17968
063 08:44:38	160.71	17969
063 10:25:53	135.40	17970
063 12:07:07	110.09	17971
063 13:48:22	84.78	17972
063 15:29:37	59.46	17973
063 17:10:51	34.16	17974
063 18:52:06	8.84	17975
063 20:33:20	-16.46	17976
063 22:14:35	-41.78	17977
063 23:55:50	-67.09	17978

**SATELLITE S4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

063 00:07:41	-152.65	7412
063 01:49:47	-178.17	7413
063 03:31:53	156.31	7414
063 05:14:00	130.78	7415
063 06:56:06	105.26	7416
063 08:38:12	79.73	7417
063 10:20:19	54.20	7418
063 12:02:25	28.68	7419
063 13:44:31	3.16	7420
063 15:26:38	-22.38	7421
063 17:08:44	-47.90	7422
063 18:50:50	-73.42	7423
063 20:32:57	-98.95	7424
063 22:15:03	-124.48	7425
063 23:57:09	-150.00	7426

064 00:32:41	-109.58	26928
064 02:14:43	-135.09	26929
064 03:56:45	-160.60	26930
064 05:38:47	173.90	26931
064 07:20:48	148.40	26932
064 09:02:50	122.89	26933
064 10:44:52	97.39	26934
064 12:26:54	71.88	26935
064 14:08:56	46.37	26936
064 15:50:58	20.86	26937
064 17:32:59	-4.63	26938
064 19:15:01	-30.14	26939
064 20:57:03	-55.64	26940
064 22:39:05	-81.15	26941

064 01:37:04	-92.40	17979
064 03:18:19	-117.71	17980
064 04:59:33	-143.02	17981
064 06:40:48	-168.33	17982
064 08:22:03	166.35	17983
064 10:03:17	141.05	17984
064 11:44:32	115.73	17985
064 13:25:47	90.41	17986
064 15:07:01	65.11	17987
064 16:48:16	39.79	17988
064 18:29:30	14.49	17989
064 20:10:45	-10.83	17990
064 21:52:00	-36.14	17991
064 23:33:14	-61.45	17992

064 01:39:16	-175.53	7427
064 03:21:22	158.95	7428
064 05:03:28	133.43	7429
064 06:45:35	107.89	7430
064 08:27:41	82.37	7431
064 10:09:47	56.85	7432
064 11:51:54	31.31	7433
064 13:34:00	5.79	7434
064 15:16:06	-19.73	7435
064 16:58:13	-45.26	7436
064 18:40:19	-70.78	7437
064 20:22:25	-96.31	7438
064 22:04:32	-121.84	7439
064 23:46:38	-147.36	7440

065 00:21:07	-106.66	26942
065 02:03:09	-132.17	26943
065 03:45:10	-157.66	26944
065 05:27:12	176.83	26945
065 07:09:14	151.32	26946
065 08:51:16	125.82	26947
065 10:33:18	100.31	26948
065 12:15:19	74.81	26949
065 13:57:21	49.31	26950
065 15:39:23	23.80	26951
065 17:21:25	-1.71	26952
065 19:03:27	-27.22	26953
065 20:45:29	-52.72	26954
065 22:27:30	-78.22	26955

065 01:14:29	-86.76	17993
065 02:55:43	-112.07	17994
065 04:36:58	-137.38	17995
065 06:18:13	-162.70	17996
065 07:59:27	172.00	17997
065 09:40:42	146.68	17998
065 11:21:56	121.38	17999
065 13:03:11	96.06	18000
065 14:44:26	70.75	18001
065 16:25:40	45.44	18002
065 18:06:55	20.13	18003
065 19:48:09	-5.18	18004
065 21:29:24	-30.49	18005
065 23:10:39	-55.81	18006

065 01:28:44	-172.88	7441
065 03:10:51	161.58	7442
065 04:52:57	136.06	7443
065 06:35:03	110.54	7444
065 08:17:10	85.01	7445
065 09:59:16	59.48	7446
065 11:41:22	33.96	7447
065 13:23:29	8.43	7448
065 15:05:35	-17.09	7449
065 16:47:41	-42.61	7450
065 18:29:48	-68.15	7451
065 20:11:54	-93.67	7452
065 21:54:00	-119.19	7453
065 23:36:07	-144.73	7454

066 00:09:32	-103.72	26956
066 01:51:34	-129.23	26957
066 03:33:36	-154.74	26958
066 05:15:38	179.75	26959
066 06:57:40	154.25	26960
066 08:39:41	128.75	26961
066 10:21:43	103.24	26962
066 12:03:45	77.74	26963
066 13:45:47	52.23	26964
066 15:27:49	26.72	26965
066 17:09:51	1.21	26966
066 18:51:52	-24.28	26967
066 20:33:54	-49.79	26968
066 22:15:56	-75.30	26969
066 23:57:58	-100.80	26970

066 00:51:53	-81.11	18007
066 02:33:08	-106.43	18008
066 04:14:22	-131.73	18009
066 05:55:37	-157.05	18010
066 07:36:52	177.63	18011
066 09:18:06	152.33	18012
066 10:59:21	127.01	18013
066 12:40:35	101.71	18014
066 14:21:50	76.39	18015
066 16:03:05	51.08	18016
066 17:44:19	25.77	18017
066 19:25:34	.46	18018
066 21:06:48	-24.84	18019
066 22:48:03	-50.16	18020

066 01:18:13	-170.25	7455
066 03:00:19	164.23	7456
066 04:42:26	138.70	7457
066 06:24:32	113.18	7458
066 08:06:38	87.66	7459
066 09:48:45	62.12	7460
066 11:30:51	36.60	7461
066 13:12:57	11.08	7462
066 14:55:04	-14.46	7463
066 16:37:10	-39.98	7464
066 18:19:16	-65.50	7465
066 20:01:23	-91.03	7466
066 21:43:29	-116.55	7467
066 23:25:35	-142.08	7468

SATELLITE C2				SATELLITE C3				SATELLITE C4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 183 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	day	hr mn sc	deg dg
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg
067 01:19:00	-98.54	34879	067 00:19:54	-33.59	28618	067 01:39:20	169.29	3384			
067 03:03:52	-124.88	34880	067 02:04:49	-59.95	28619	067 03:24:14	142.94	3385			
067 04:48:44	-151.22	34881	067 03:49:44	-86.30	28620	067 05:09:08	116.59	3386			
067 06:33:36	-177.56	34882	067 05:34:40	-112.65	28621	067 06:54:02	90.24	3387			
067 08:18:28	156.09	34883	067 07:19:35	-139.01	28622	067 08:38:56	63.89	3388			
067 10:03:20	129.75	34884	067 09:04:30	-165.37	28623	067 10:23:50	37.54	3389			
067 11:48:12	103.41	34885	067 10:49:25	168.28	28624	067 12:08:44	11.19	3390			
067 13:33:04	77.07	34886	067 12:34:20	141.92	28625	067 13:53:38	-15.16	3391			
067 15:17:56	50.72	34887	067 14:19:15	115.57	28626	067 15:38:32	-41.51	3392			
067 17:02:48	24.38	34888	067 16:04:10	89.21	28627	067 17:23:26	-67.86	3393			
067 18:47:40	-1.96	34889	067 17:49:06	62.86	28628	067 19:08:20	-94.22	3394			
067 20:32:32	-28.30	34890	067 19:34:01	36.50	28629	067 20:53:14	-120.57	3395			
067 22:17:24	-54.65	34891	067 21:18:56	10.15	28630	067 22:38:08	-146.92	3396			
			067 23:03:51	-16.21	28631						
068 00:02:16	-80.99	34892	068 00:48:46	-42.56	28632	068 00:23:02	-173.27	3397			
068 01:47:08	-107.33	34893	068 02:33:41	-68.92	28633	068 02:07:56	160.38	3398			
068 03:32:00	-133.67	34894	068 04:18:36	-95.28	28634	068 03:52:50	134.03	3399			
068 05:16:52	-160.02	34895	068 06:03:32	-121.63	28635	068 05:37:44	107.68	3400			
068 07:01:44	173.64	34896	068 07:48:27	-147.98	28636	068 07:22:38	81.33	3401			
068 08:46:36	147.30	34897	068 09:33:22	-174.34	28637	068 09:07:32	54.98	3402			
068 10:31:28	120.96	34898	068 11:18:17	159.30	28638	068 10:52:26	28.63	3403			
068 12:16:20	94.61	34899	068 13:03:12	132.95	28639	068 12:37:20	2.28	3404			
068 14:01:12	68.27	34900	068 14:48:07	106.59	28640	068 14:22:14	-24.07	3405			
068 15:46:04	41.93	34901	068 16:33:02	80.24	28641	068 16:07:08	-50.42	3406			
068 17:30:56	15.59	34902	068 18:17:58	53.88	28642	068 17:52:02	-76.77	3407			
068 19:15:48	-10.75	34903	068 20:02:53	27.53	28643	068 19:36:56	-103.12	3408			
068 21:00:40	-37.10	34904	068 21:47:48	1.17	28644	068 21:21:50	-129.47	3409			
068 22:45:32	-63.44	34905	068 23:32:43	-25.18	28645	068 23:06:44	-155.82	3410			
069 00:30:24	-89.78	34906	069 01:17:38	-51.54	28646	069 00:51:38	177.83	3411			
069 02:15:16	-116.12	34907	069 03:02:33	-77.89	28647	069 02:36:32	151.48	3412			
069 04:00:08	-142.47	34908	069 04:47:28	-104.25	28648	069 04:21:26	125.13	3413			
069 05:45:00	-168.81	34909	069 06:33:24	-130.60	28649	069 06:06:20	98.78	3414			
069 07:29:52	164.85	34910	069 08:17:19	-156.96	28650	069 07:51:14	72.43	3415			
069 09:14:44	138.51	34911	069 10:02:14	176.69	28651	069 09:36:08	46.08	3416			
069 10:59:36	112.16	34912	069 11:47:09	150.33	28652	069 11:21:02	19.73	3417			
069 12:44:28	85.82	34913	069 13:32:04	123.97	28653	069 13:05:56	-6.62	3418			
069 14:29:20	59.48	34914	069 15:16:59	97.62	28654	069 14:50:50	-32.97	3419			
069 16:14:12	33.14	34915	069 17:01:54	71.26	28655	069 16:35:44	-59.32	3420			
069 17:59:04	6.79	34916	069 18:46:50	44.91	28656	069 18:20:38	-85.67	3421			
069 19:43:56	-19.55	34917	069 20:31:45	18.55	28657	069 20:05:32	-112.02	3422			
069 21:28:48	-45.89	34918	069 22:16:40	-7.80	28658	069 21:50:26	-138.37	3423			
069 23:13:40	-72.23	34919				069 23:35:20	-164.73	3424			
070 00:58:32	-98.58	34920	070 00:01:35	-34.16	28659	070 01:20:14	168.92	3425			
070 02:43:24	-124.92	34921	070 01:46:30	-60.51	28660	070 03:05:08	142.57	3426			
070 04:28:16	-151.26	34922	070 03:31:25	-86.87	28661	070 04:50:02	116.22	3427			
070 06:13:08	-177.60	34923	070 05:16:20	-113.22	28662	070 06:34:56	89.87	3428			
070 07:58:00	156.06	34924	070 07:01:16	-139.58	28663	070 08:19:50	63.52	3429			
070 09:42:52	129.71	34925	070 08:46:11	-165.93	28664	070 10:04:44	37.17	3430			
070 11:27:44	103.37	34926	070 10:31:06	167.71	28665	070 11:49:38	10.82	3431			
070 13:12:36	77.03	34927	070 12:16:01	141.36	28666	070 13:34:32	-15.53	3432			
070 14:57:28	50.69	34928	070 14:00:56	115.00	28667	070 15:19:26	-41.88	3433			
070 16:42:20	24.34	34929	070 15:45:51	88.64	28668	070 17:04:19	-68.23	3434			
070 18:27:12	-2.00	34930	070 17:30:47	62.29	28669	070 18:49:13	-94.58	3435			
070 20:12:04	-28.34	34931	070 19:15:42	35.94	28670	070 20:34:07	-120.93	3436			
070 21:56:56	-54.68	34932	070 21:00:37	9.58	28671	070 22:19:01	-147.28	3437			
070 23:41:48	-81.03	34933	070 22:45:32	-16.78	28672						

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT
day hr mn sc	deg	dg		day hr mn sc	deg	dg		day hr mn sc	deg	dg	
067 01:40:00	-126.31	26971		067 00:29:18	-75.48	18021		067 01:07:42	-167.61	7469	
067 03:22:02	-151.82	26972		067 02:10:32	-100.78	18022		067 02:49:48	166.87	7470	
067 05:04:03	-177.31	26973		067 03:51:47	-126.10	18023		067 04:31:54	141.35	7471	
067 06:46:05	157.18	26974		067 05:33:02	-151.41	18024		067 06:14:01	115.81	7472	
067 08:28:07	131.67	26975		067 07:14:16	-176.72	18025		067 07:56:07	90.29	7473	
067 10:10:09	106.17	26976		067 08:55:31	157.97	18026		067 09:38:14	64.76	7474	
067 11:52:11	80.66	26977		067 10:36:45	132.66	18027		067 11:20:20	39.24	7475	
067 13:34:13	55.15	26978		067 12:18:00	107.35	18028		067 13:02:26	13.71	7476	
067 15:16:14	29.66	26979		067 13:59:15	82.03	18029		067 14:44:33	-11.82	7477	
067 16:58:16	4.15	26980		067 15:40:29	56.73	18030		067 16:26:39	-37.34	7478	
067 18:40:18	-21.36	26981		067 17:21:44	31.41	18031		067 18:08:45	-62.86	7479	
067 20:22:20	-46.87	26982		067 19:02:58	6.11	18032		067 19:50:52	-88.40	7480	
067 22:04:22	-72.37	26983		067 20:44:13	-19.21	18033		067 21:32:58	-113.92	7481	
067 23:46:23	-97.87	26984		067 22:25:28	-44.53	18034		067 23:15:04	-139.44	7482	
068 01:28:25	-123.38	26985		068 00:06:42	-69.83	18035		068 00:57:11	-164.97	7483	
068 03:10:27	-148.88	26986		068 01:47:57	-95.15	18036		068 02:39:17	169.50	7484	
068 04:52:29	-174.39	26987		068 03:29:11	-120.45	18037		068 04:21:23	143.98	7485	
068 06:34:31	160.10	26988		068 05:10:26	-145.76	18038		068 06:03:30	118.45	7486	
068 08:16:33	134.59	26989		068 06:51:41	-171.08	18039		068 07:45:36	92.93	7487	
068 09:58:34	109.10	26990		068 08:32:55	163.62	18040		068 09:27:42	67.41	7488	
068 11:40:36	83.59	26991		068 10:14:10	138.30	18041		068 11:09:49	41.87	7489	
068 13:22:38	58.09	26992		068 11:55:24	113.00	18042		068 12:51:55	16.35	7490	
068 15:04:40	32.58	26993		068 13:36:39	87.68	18043		068 14:34:01	-9.17	7491	
068 16:46:42	7.07	26994		068 15:17:54	62.36	18044		068 16:16:08	-34.71	7492	
068 18:28:44	-18.44	26995		068 16:59:08	37.06	18045		068 17:58:14	-60.23	7493	
068 20:10:45	-43.93	26996		068 18:40:23	11.74	18046		068 19:40:20	-85.75	7494	
068 21:52:47	-69.44	26997		068 20:21:37	-13.56	18047		068 21:22:27	-111.28	7495	
068 23:34:49	-94.95	26998		068 22:02:52	-38.88	18048		068 23:04:33	-136.80	7496	
068 23:44:07	-64.19	18049									
069 01:16:51	-120.45	26999		069 01:25:21	-89.50	18050		069 00:46:39	-162.33	7497	
069 02:58:53	-145.96	27000		069 03:06:36	-114.81	18051		069 02:28:46	172.14	7498	
069 04:40:55	-171.47	27001		069 04:47:50	-140.12	18052		069 04:10:52	146.62	7499	
069 06:22:56	163.04	27002		069 06:29:05	-165.43	18053		069 05:52:58	121.10	7500	
069 08:04:58	137.53	27003		069 08:10:20	169.25	18054		069 07:35:05	95.56	7501	
069 09:47:00	112.02	27004		069 09:51:34	143.95	18055		069 09:17:11	70.04	7502	
069 11:29:02	86.51	27005		069 11:32:49	118.63	18056		069 10:59:17	44.52	7503	
069 13:11:04	61.01	27006		069 13:14:03	93.33	18057		069 12:41:24	18.99	7504	
069 14:53:06	35.50	27007		069 14:55:18	68.01	18058		069 14:23:30	-6.54	7505	
069 16:35:07	10.01	27008		069 16:36:33	42.70	18059		069 16:05:36	-32.06	7506	
069 18:17:09	-15.50	27009		069 18:17:47	17.39	18060		069 17:47:43	-57.59	7507	
069 19:59:11	-41.01	27010		069 19:59:02	-7.92	18061		069 19:29:49	-83.11	7508	
069 21:41:13	-66.52	27011		069 21:40:17	-33.24	18062		069 21:11:55	-108.63	7509	
069 23:23:15	-92.02	27012		069 23:21:31	-58.54	18063		069 22:54:02	-134.17	7510	
070 01:05:17	-117.53	27013		070 01:02:46	-83.86	18064		070 00:36:08	-159.69	7511	
070 02:47:18	-143.03	27014		070 02:44:00	-109.16	18065		070 02:18:14	174.79	7512	
070 04:29:20	-168.53	27015		070 04:25:15	-134.48	18066		070 04:00:21	149.25	7513	
070 06:11:22	165.96	27016		070 06:06:30	-159.80	18067		070 05:42:27	123.73	7514	
070 07:53:24	140.45	27017		070 07:47:44	174.90	18068		070 07:24:33	98.21	7515	
070 09:35:26	114.94	27018		070 09:28:59	149.58	18069		070 09:06:40	72.68	7516	
070 11:17:28	89.44	27019		070 11:10:13	124.28	18070		070 10:48:46	47.16	7517	
070 12:59:29	63.94	27020		070 12:51:28	98.96	18071		070 12:30:52	21.64	7518	
070 14:41:31	38.43	27021		070 14:32:43	73.65	18072		070 14:12:59	-3.90	7519	
070 16:23:33	12.93	27022		070 16:13:57	48.34	18073		070 15:55:05	-29.42	7520	
070 18:05:35	-12.58	27023		070 17:55:12	23.03	18074		070 17:37:11	-54.94	7521	
070 19:47:37	-38.09	27024		070 19:36:26	-2.28	18075		070 19:19:18	-80.48	7522	
070 21:29:38	-63.58	27025		070 21:17:41	-27.59	18076		070 21:01:24	-106.00	7523	
070 23:11:40	-89.09	27026		070 22:58:56	-52.91	18077		070 22:43:30	-131.52	7524	

SATELLITE C2				SATELLITE C3				SATELLITE C4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 183 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT
day hr mn sc	deg	dg		day hr mn sc	deg	dg		day hr mn sc	deg	dg	
071 01:26:40	-107.37	34934		071 00:30:27	-43.13	28673		071 00:03:55	-173.63	3438	
071 03:11:32	-133.71	34935		071 02:15:22	-69.49	28674		071 01:48:49	160.02	3439	
071 04:56:24	-160.05	34936		071 04:00:17	-95.84	28675		071 03:33:43	133.67	3440	
071 06:41:16	173.60	34937		071 05:45:13	-122.20	28676		071 05:18:37	107.32	3441	
071 08:26:08	147.26	34938		071 07:30:08	-148.55	28677		071 07:03:31	80.97	3442	
071 10:11:00	120.92	34939		071 09:15:03	-174.91	28678		071 08:48:25	54.62	3443	
071 11:55:52	94.58	34940		071 10:59:58	158.74	28679		071 10:33:19	28.26	3444	
071 13:40:44	68.23	34941		071 12:44:53	132.38	28680		071 12:18:13	1.91	3445	
071 15:25:36	41.89	34942		071 14:29:48	106.03	28681		071 14:03:07	-24.44	3446	
071 17:10:28	15.55	34943		071 16:14:43	79.67	28682		071 15:48:01	-50.79	3447	
071 18:55:20	-10.79	34944		071 17:59:39	53.32	28683		071 17:32:55	-77.14	3448	
071 20:40:12	-37.13	34945		071 19:44:34	26.96	28684		071 19:17:49	-103.49	3449	
071 22:25:04	-63.48	34946		071 21:29:29	.61	28685		071 21:02:43	-129.84	3450	
				071 23:14:24	-25.75	28686		071 22:47:37	-156.19	3451	
072 00:09:56	-89.82	34947		072 00:59:19	-52.11	28687		072 00:32:31	177.46	3452	
072 01:54:48	-116.16	34948		072 02:44:14	-78.46	28688		072 02:17:25	151.11	3453	
072 03:39:40	-142.50	34949		072 04:29:09	-104.82	28689		072 04:02:19	124.76	3454	
072 05:24:32	-168.85	34950		072 06:14:05	-131.17	28690		072 05:47:13	98.41	3455	
072 07:09:24	164.81	34951		072 07:59:00	-157.53	28691		072 07:32:07	72.06	3456	
072 08:54:16	138.47	34952		072 09:43:55	176.12	28692		072 09:17:01	45.71	3457	
072 10:39:08	112.13	34953		072 11:28:50	149.76	28693		072 11:01:55	19.36	3458	
072 12:24:00	85.78	34954		072 13:13:45	123.41	28694		072 12:46:49	-6.99	3459	
072 14:08:52	59.44	34955		072 14:58:40	97.05	28695		072 14:31:43	-33.34	3460	
072 15:53:44	33.10	34956		072 16:43:36	70.70	28696		072 16:16:37	-59.69	3461	
072 17:38:36	6.76	34957		072 18:28:31	44.34	28697		072 18:01:31	-86.04	3462	
072 19:23:28	-19.59	34958		072 20:13:26	17.99	28698		072 19:46:25	-112.39	3463	
072 21:08:20	-45.93	34959		072 21:58:21	-8.37	28699		072 21:31:19	-138.74	3464	
072 22:53:12	-72.27	34960		072 23:43:16	-34.73	28700		072 23:16:13	-165.09	3465	
073 00:38:04	-98.61	34961		073 01:28:11	-61.08	28701		073 01:01:07	168.56	3466	
073 02:22:56	-124.95	34962		073 03:13:06	-87.44	28702		073 02:46:01	142.21	3467	
073 04:07:48	-151.30	34963		073 04:58:02	-113.79	28703		073 04:30:55	115.86	3468	
073 05:52:40	-177.64	34964		073 06:42:57	-140.15	28704		073 06:15:49	89.51	3469	
073 07:37:32	156.02	34965		073 08:27:52	-166.50	28705		073 08:00:43	63.16	3470	
073 09:22:24	129.68	34966		073 10:12:47	167.14	28706		073 09:45:37	36.81	3471	
073 11:07:16	103.33	34967		073 11:57:42	140.79	28707		073 11:30:31	10.45	3472	
073 12:52:08	76.99	34968		073 13:42:37	114.43	28708		073 13:15:25	-15.90	3473	
073 14:37:00	50.65	34969		073 15:27:32	88.08	28709		073 15:00:19	-42.25	3474	
073 16:21:52	24.31	34970		073 17:12:28	61.72	28710		073 16:45:13	-68.60	3475	
073 18:06:44	-2.04	34971		073 18:57:23	35.37	28711		073 18:30:07	-94.95	3476	
073 19:51:36	-28.38	34972		073 20:42:18	9.01	28712		073 20:15:01	-121.30	3477	
073 21:36:28	-54.72	34973		073 22:27:13	-17.34	28713		073 21:59:55	-147.65	3478	
073 23:21:20	-81.06	34974						073 23:44:49	-174.00	3479	
074 01:06:12	-107.41	34975		074 00:12:08	-43.70	28714		074 01:29:43	159.65	3480	
074 02:51:04	-133.75	34976		074 01:57:03	-70.06	28715		074 03:14:37	133.30	3481	
074 04:35:56	-160.09	34977		074 03:41:59	-96.41	28716		074 04:59:31	106.95	3482	
074 06:20:48	173.57	34978		074 05:26:54	-122.76	28717		074 06:44:25	80.60	3483	
074 08:05:40	147.23	34979		074 07:11:49	-149.12	28718		074 08:29:19	54.25	3484	
074 09:50:32	120.88	34980		074 08:56:44	-175.48	28719		074 10:14:13	27.90	3485	
074 11:35:24	94.54	34981		074 10:41:39	158.17	28720		074 11:59:07	1.55	3486	
074 13:20:16	68.20	34982		074 12:26:34	131.81	28721		074 13:44:01	-24.80	3487	
074 15:05:08	41.86	34983		074 14:11:29	105.46	28722		074 15:28:55	-51.15	3488	
074 16:50:00	15.51	34984		074 15:56:25	79.10	28723		074 17:13:49	-77.50	3489	
074 18:34:52	-10.83	34985		074 17:41:20	52.75	28724		074 18:58:43	-103.85	3490	
074 20:19:44	-37.17	34986		074 19:26:15	26.39	28725		074 20:43:37	-130.20	3491	
074 22:04:37	-63.51	34987		074 21:11:10	.04	28726		074 22:28:31	-156.55	3492	
074 23:49:29	-89.85	34988		074 22:56:05	-26.32	28727					

West longitude is negative (-)

SATELLITE S2							SATELLITE S3							SATELLITE S4							
Ascending Node Predictions							Ascending Node Predictions							Ascending Node Predictions							
Predicting for 182 days							Predicting for 183 days							Predicting for 183 days							
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	day	hr	mn	sc	deg	dg	day	hr	mn	sc
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc
071	00:53:42	-114.60	27027	071	00:40:10	-78.21	18078	071	00:25:37	-157.05	7525							071	00:25:37	-157.05	7525
071	02:35:44	-140.10	27028	071	02:21:25	-103.53	18079	071	02:07:43	177.43	7526							071	02:07:43	177.43	7526
071	04:17:46	-165.61	27029	071	04:02:39	-128.83	18080	071	03:49:49	151.90	7527							071	03:49:49	151.90	7527
071	05:59:48	168.88	27030	071	05:43:54	-154.15	18081	071	05:31:56	126.37	7528							071	05:31:56	126.37	7528
071	07:41:49	143.39	27031	071	07:25:09	-179.46	18082	071	07:14:02	100.85	7529							071	07:14:02	100.85	7529
071	09:23:51	117.88	27032	071	09:06:23	155.23	18083	071	08:56:08	75.33	7530							071	08:56:08	75.33	7530
071	11:05:53	92.37	27033	071	10:47:38	129.92	18084	071	10:38:15	49.79	7531							071	10:38:15	49.79	7531
071	12:47:55	66.86	27034	071	12:28:52	104.61	18085	071	12:20:21	24.27	7532							071	12:20:21	24.27	7532
071	14:29:57	41.36	27035	071	14:10:07	79.30	18086	071	14:02:27	-1.25	7533							071	14:02:27	-1.25	7533
071	16:11:59	15.85	27036	071	15:51:22	53.98	18087	071	15:44:34	-26.78	7534							071	15:44:34	-26.78	7534
071	17:54:00	-9.64	27037	071	17:32:36	28.68	18088	071	17:26:40	-52.31	7535							071	17:26:40	-52.31	7535
071	19:36:02	-35.15	27038	071	19:13:51	3.36	18089	071	19:08:46	-77.83	7536							071	19:08:46	-77.83	7536
071	21:18:04	-60.66	27039	071	20:55:05	-21.94	18090	071	20:50:53	-103.36	7537							071	20:50:53	-103.36	7537
071	23:00:06	-86.17	27040	071	22:36:20	-47.26	18091	071	22:32:59	-128.88	7538							071	22:32:59	-128.88	7538
072	00:42:08	-111.67	27041	072	00:17:35	-72.58	18092	072	00:15:05	-154.40	7539							072	00:15:05	-154.40	7539
072	02:24:10	-137.18	27042	072	01:58:49	-97.88	18093	072	01:57:12	-179.94	7540							072	01:57:12	-179.94	7540
072	04:06:11	-162.68	27043	072	03:40:04	-123.20	18094	072	03:39:18	154.54	7541							072	03:39:18	154.54	7541
072	05:48:13	171.82	27044	072	05:21:19	-148.51	18095	072	05:21:24	129.02	7542							072	05:21:24	129.02	7542
072	07:30:15	146.31	27045	072	07:02:33	-173.82	18096	072	07:03:31	103.48	7543							072	07:03:31	103.48	7543
072	09:12:17	120.80	27046	072	08:43:48	160.87	18097	072	08:45:37	77.96	7544							072	08:45:37	77.96	7544
072	10:54:19	95.29	27047	072	10:25:02	135.56	18098	072	10:27:43	52.44	7545							072	10:27:43	52.44	7545
072	12:36:21	69.79	27048	072	12:06:17	110.25	18099	072	12:09:50	26.91	7546							072	12:09:50	26.91	7546
072	14:18:22	44.29	27049	072	13:47:32	84.93	18100	072	13:51:56	1.39	7547							072	13:51:56	1.39	7547
072	16:00:24	18.78	27050	072	15:28:46	59.63	18101	072	15:34:02	-24.14	7548							072	15:34:02	-24.14	7548
072	17:42:26	-6.72	27051	072	17:10:01	34.31	18102	072	17:16:09	-49.67	7549							072	17:16:09	-49.67	7549
072	19:24:28	-32.23	27052	072	18:51:15	9.01	18103	072	18:58:15	-75.19	7550							072	18:58:15	-75.19	7550
072	21:06:30	-57.74	27053	072	20:32:30	-16.31	18104	072	20:40:21	-100.71	7551							072	20:40:21	-100.71	7551
072	22:48:32	-83.25	27054	072	22:13:45	-41.62	18105	072	22:22:28	-126.25	7552							072	22:22:28	-126.25	7552
072	23:54:59	-66.93	18106																		
073	00:30:33	-108.74	27055	073	01:36:14	-92.24	18107	073	00:04:34	-151.77	7553							073	00:04:34	-151.77	7553
073	02:12:35	-134.25	27056	073	03:17:28	-117.55	18108	073	01:46:40	-177.29	7554							073	01:46:40	-177.29	7554
073	03:54:37	-159.75	27057	073	04:58:43	-142.86	18109	073	03:28:47	157.18	7555							073	03:28:47	157.18	7555
073	05:36:39	174.74	27058	073	06:39:58	-168.18	18110	073	05:10:53	131.65	7556							073	05:10:53	131.65	7556
073	07:18:41	149.23	27059	073	08:21:12	166.52	18111	073	06:52:59	106.13	7557							073	06:52:59	106.13	7557
073	09:00:43	123.72	27060	073	10:02:27	141.20	18112	073	08:35:06	80.60	7558							073	08:35:06	80.60	7558
073	10:42:44	98.23	27061	073	11:43:41	115.90	18113	073	10:17:12	55.08	7559							073	10:17:12	55.08	7559
073	12:24:46	72.72	27062	073	13:24:56	90.58	18114	073	11:59:18	29.56	7560							073	11:59:18	29.56	7560
073	14:06:48	47.21	27063	073	15:06:11	65.26	18115	073	13:41:25	4.02	7561							073	13:41:25	4.02	7561
073	15:48:50	21.71	27064	073	16:47:25	39.96	18116	073	15:23:31	-21.50	7562							073	15:23:31	-21.50	7562
073	17:30:52	-3.80	27065	073	18:28:40	14.65	18117	073	17:05:37	-47.02	7563							073	17:05:37	-47.02	7563
073	19:12:54	-29.31	27066	073	20:09:54	-10.66	18118	073	18:47:44	-72.56	7564							073	18:47:44	-72.56	7564
073	20:54:55	-54.80	27067	073	21:51:09	-35.97	18119	073	20:29:50	-98.08	7565							073	20:29:50	-98.08	7565
073	22:36:57	-80.31	27068	073	23:32:24	-61.29	18120	073	22:11:56	-123.60	7566							073	22:11:56	-123.60	7566
073	23:54:03	-149.13	18120																		
074	00:18:59	-105.82	27069	074	01:13:38	-86.59	18121	074	01:36:09	-174.65	7568							074	01:36:09	-174.65	7568
074	02:01:01	-131.32	27070	074	02:54:53	-111.91	18122	074	03:18:15	159.83	7569							074	03:18:15	159.83	7569
074	03:43:03	-156.83	27071	074	04:36:08	-137.23	18123	074	05:00:22	134.29	7570							074	05:00:22	134.29	7570
074	05:25:05	177.66	27072	074	06:17:22	-162.53	18124	074	06:42:28	108.77	7571							074	06:42:28	108.77	7571
074	07:07:06	152.17	27073	074	07:58:37	172.15	18125	074	08:24:34	83.25	7572							074	08:24:34	83.25	7572
074	08:49:08	126.66	27074	074	09:39:51	146.85	18126	074	10:06:41	57.71	7573							074	10:06:41	57.71	7573
074	10:31:10	101.15	27075	074	11:21:06	121.53	18127	074	11:48:47	32.19	7574							074	11:48:47	32.19	7574
074	12:13:12	75.64	27076	074	13:02:21	96.22	18128	074	13:30:53	6.67	7575							074	13:30:53	6.67	7575
074	13:55:14	50.14	27077	074	14:43:35	70.91	18129	074	15:13:00	-18.86	7576							074	15:13:00	-18.86	7576
074	15:37:16	24.63	27078	074	16:24:50	45.60	18130	074	16:55:06	-44.38	7577		</td								

**SATELLITE C2**
**Ascending Node Predictions**
**Predicting for 183 days**
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

075 01:34:21 -116.20 34989  
 075 03:19:13 -142.54 34990  
 075 05:04:05 -168.88 34991  
 075 06:48:57 164.78 34992  
 075 08:33:49 138.43 34993  
 075 10:18:41 112.09 34994  
 075 12:03:33 85.75 34995  
 075 13:48:25 59.41 34996  
 075 15:33:17 33.07 34997  
 075 17:18:09 6.72 34998  
 075 19:03:01 -19.62 34999  
 075 20:47:53 -45.96 35000  
 075 22:32:45 -72.30 35001

**SATELLITE C3**
**Ascending Node Predictions**
**Predicting for 183 days**
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

075 00:41:00 -52.67 28728  
 075 02:25:55 -79.03 28729  
 075 04:10:51 -105.38 28730  
 075 05:55:46 -131.74 28731  
 075 07:40:41 -158.10 28732  
 075 09:25:36 175.55 28733  
 075 11:10:31 149.19 28734  
 075 12:55:26 122.84 28735  
 075 14:40:22 96.48 28736  
 075 16:25:17 70.13 28737  
 075 18:10:12 43.77 28738  
 075 19:55:07 17.42 28739  
 075 21:40:02 -8.94 28740  
 075 23:24:57 -35.29 28741

**SATELLITE C4**
**Ascending Node Predictions**
**Predicting for 183 days**
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

075 00:13:25 177.10 3493  
 075 01:58:19 150.75 3494  
 075 03:43:13 124.40 3495  
 075 05:28:07 98.05 3496  
 075 07:13:01 71.70 3497  
 075 08:57:55 45.34 3498  
 075 10:42:49 18.99 3499  
 075 12:27:43 -7.36 3500  
 075 14:12:37 -33.71 3501  
 075 15:57:31 -60.06 3502  
 075 17:42:25 -86.41 3503  
 075 19:27:19 -112.76 3504  
 075 21:12:13 -139.11 3505  
 075 22:57:06 -165.46 3506

076 00:17:37 -98.65 35002  
 076 02:02:29 -124.99 35003  
 076 03:47:21 -151.33 35004  
 076 05:32:13 -177.67 35005  
 076 07:17:05 155.98 35006  
 076 09:01:57 129.64 35007  
 076 10:46:49 103.30 35008  
 076 12:31:41 76.96 35009  
 076 14:16:33 50.62 35010  
 076 16:01:25 24.27 35011  
 076 17:46:17 -2.07 35012  
 076 19:31:09 -28.41 35013  
 076 21:16:01 -54.75 35014  
 076 23:00:53 -81.10 35015

076 01:09:52 -61.65 28742  
 076 02:54:48 -88.00 28743  
 076 04:39:43 -114.36 28744  
 076 06:24:38 -140.71 28745  
 076 08:09:33 -167.07 28746  
 076 09:54:28 166.57 28747  
 076 11:39:23 140.22 28748  
 076 13:24:19 113.87 28749  
 076 15:09:14 87.51 28750  
 076 16:54:09 61.15 28751  
 076 18:39:04 34.80 28752  
 076 20:23:59 8.44 28753  
 076 22:08:54 -17.91 28754  
 076 23:53:49 -44.27 28755

076 00:42:00 168.19 3507  
 076 02:26:54 141.84 3508  
 076 04:11:48 115.49 3509  
 076 05:56:42 89.14 3510  
 076 07:41:36 62.79 3511  
 076 09:26:30 36.44 3512  
 076 11:11:24 10.09 3513  
 076 12:56:18 -16.26 3514  
 076 14:41:12 -42.61 3515  
 076 16:26:06 -68.96 3516  
 076 18:11:00 -95.32 3517  
 076 19:55:54 -121.67 3518  
 076 21:40:48 -148.02 3519  
 076 23:25:42 -174.37 3520

077 00:45:45 -107.44 35016  
 077 02:30:37 -133.78 35017  
 077 04:15:29 -160.12 35018  
 077 06:00:21 173.53 35019  
 077 07:45:13 147.19 35020  
 077 09:30:05 120.85 35021  
 077 11:14:57 94.51 35022  
 077 12:59:49 68.16 35023  
 077 14:44:41 41.82 35024  
 077 16:29:33 15.48 35025  
 077 18:14:25 -10.86 35026  
 077 19:59:17 -37.20 35027  
 077 21:44:09 -63.55 35028  
 077 23:29:01 -89.89 35029

077 01:38:45 -70.62 28756  
 077 03:23:40 -96.98 28757  
 077 05:08:35 -123.33 28758  
 077 06:53:30 -149.69 28759  
 077 08:38:25 -176.05 28760  
 077 10:23:20 157.60 28761  
 077 12:08:15 131.24 28762  
 077 13:53:11 104.89 28763  
 077 15:38:06 78.53 28764  
 077 17:23:01 52.18 28765  
 077 19:07:56 25.82 28766  
 077 20:52:51 -.53 28767  
 077 22:37:46 -26.89 28768

077 01:10:36 159.28 3521  
 077 02:55:30 132.93 3522  
 077 04:40:24 106.58 3523  
 077 06:25:18 80.23 3524  
 077 08:10:12 53.88 3525  
 077 09:55:06 27.53 3526  
 077 11:40:00 1.18 3527  
 077 13:24:54 -25.17 3528  
 077 15:09:48 -51.52 3529  
 077 16:54:42 -77.87 3530  
 077 18:39:36 -104.22 3531  
 077 20:24:30 -130.57 3532  
 077 22:09:24 -156.92 3533  
 077 23:54:18 176.73 3534

078 01:13:53 -116.23 35030  
 078 02:58:45 -142.57 35031  
 078 04:43:37 -168.92 35032  
 078 06:28:29 164.74 35033  
 078 08:13:21 138.40 35034  
 078 09:58:13 112.06 35035  
 078 11:43:05 85.71 35036  
 078 13:27:57 59.37 35037  
 078 15:12:49 33.03 35038  
 078 16:57:41 6.69 35039  
 078 18:42:33 -19.66 35040  
 078 20:27:25 -46.00 35041  
 078 22:12:17 -72.34 35042  
 078 23:57:09 -98.68 35043

078 00:22:42 -53.24 28769  
 078 02:07:37 -79.60 28770  
 078 03:52:32 -105.95 28771  
 078 05:37:27 -132.31 28772  
 078 07:22:22 -158.66 28773  
 078 09:07:17 174.98 28774  
 078 10:52:12 148.62 28775  
 078 12:37:08 122.27 28776  
 078 14:22:03 95.92 28777  
 078 16:06:58 69.56 28778  
 078 17:51:53 43.20 28779  
 078 19:36:48 16.85 28780  
 078 21:21:43 -.51 28781  
 078 23:06:39 -35.86 28782

078 01:39:12 150.38 3535  
 078 03:24:06 124.03 3536  
 078 05:09:00 97.68 3537  
 078 06:53:54 71.33 3538  
 078 08:38:48 44.98 3539  
 078 10:23:42 18.63 3540  
 078 12:08:36 -7.73 3541  
 078 13:53:30 -34.08 3542  
 078 15:38:24 -60.43 3543  
 078 17:23:18 -86.78 3544  
 078 19:08:12 -113.13 3545  
 078 20:53:06 -139.48 3546  
 078 22:38:00 -165.83 3547

**SATELLITE S2**
**Ascending Node Predictions**

Predicting for 182 days

 TIME (GMT) E LONG ORBIT  
 day hr mn sc deg dg

075 00:07:25	-102.90	27083
075 01:49:27	-128.40	27084
075 03:31:28	-153.90	27085
075 05:13:30	-179.40	27086
075 06:55:32	155.09	27087
075 08:37:34	129.58	27088
075 10:19:36	104.07	27089
075 12:01:38	78.57	27090
075 13:43:39	53.07	27091
075 15:25:41	27.56	27092
075 17:07:43	2.06	27093
075 18:49:45	-23.45	27094
075 20:31:47	-48.96	27095
075 22:13:49	-74.47	27096
075 23:55:50	-99.96	27097

**SATELLITE S3**
**Ascending Node Predictions**

Predicting for 183 days

 TIME (GMT) E LONG ORBIT  
 day hr mn sc deg dg

075 00:51:03	-80.96	18135
075 02:32:17	-106.26	18136
075 04:13:32	-131.58	18137
075 05:54:47	-156.89	18138
075 07:36:01	177.80	18139
075 09:17:16	152.49	18140
075 10:58:30	127.18	18141
075 12:39:45	101.87	18142
075 14:21:00	76.55	18143
075 16:02:14	51.25	18144
075 17:43:29	25.93	18145
075 19:24:43	.63	18146
075 21:05:58	-24.69	18147
075 22:47:13	-50.01	18148

**SATELLITE S4**
**Ascending Node Predictions**

Predicting for 183 days

 TIME (GMT) E LONG ORBIT  
 day hr mn sc deg dg

075 01:25:38	-172.02	7582
075 03:07:44	162.46	7583
075 04:49:51	136.93	7584
075 06:31:57	111.41	7585
075 08:14:03	85.88	7586
075 09:56:10	60.35	7587
075 11:38:16	34.83	7588
075 13:20:22	9.31	7589
075 15:02:29	-16.23	7590
075 16:44:35	-41.75	7591
075 18:26:41	-67.27	7592
075 20:08:48	-92.80	7593
075 21:50:54	-118.33	7594
075 23:33:00	-143.85	7595

076 01:37:52	-125.47	27098
076 03:19:54	-150.97	27099
076 05:01:56	-176.48	27100
076 06:43:58	158.01	27101
076 08:26:00	132.50	27102
076 10:08:01	107.01	27103
076 11:50:03	81.50	27104
076 13:32:05	55.99	27105
076 15:14:07	30.49	27106
076 16:56:09	4.98	27107
076 18:38:11	-20.53	27108
076 20:20:12	-46.02	27109
076 22:02:14	-71.53	27110
076 23:44:16	-97.04	27111

076 00:28:27	-75.31	18149
076 02:09:42	-100.63	18150
076 03:50:56	-125.93	18151
076 05:32:11	-151.25	18152
076 07:13:26	-176.56	18153
076 08:54:40	158.13	18154
076 10:35:55	132.82	18155
076 12:17:10	107.50	18156
076 13:58:24	82.20	18157
076 15:39:39	56.88	18158
076 17:20:53	31.58	18159
076 19:02:08	6.26	18160
076 20:43:23	-19.05	18161
076 22:24:37	-44.36	18162

076 01:15:07	-169.38	7596
076 02:57:13	165.10	7597
076 04:39:19	139.58	7598
076 06:21:26	114.04	7599
076 08:03:32	88.52	7600
076 09:45:38	63.00	7601
076 11:27:45	37.46	7602
076 13:09:51	11.94	7603
076 14:51:57	-13.58	7604
076 16:34:04	-39.11	7605
076 18:16:10	-64.63	7606
076 19:58:16	-90.16	7607
076 21:40:23	-115.69	7608
076 23:22:29	-141.21	7609

077 01:26:18	-122.54	27112
077 03:08:20	-148.05	27113
077 04:50:22	-173.56	27114
077 06:32:23	160.95	27115
077 08:14:25	135.44	27116
077 09:56:27	109.93	27117
077 11:38:29	84.42	27118
077 13:20:31	58.92	27119
077 15:02:33	33.41	27120
077 16:44:34	7.91	27121
077 18:26:36	-17.59	27122
077 20:08:38	-43.10	27123
077 21:50:40	-68.61	27124
077 23:32:42	-94.12	27125

077 00:05:52	-69.67	18163
077 01:47:06	-94.98	18164
077 03:28:21	-120.29	18165
077 05:09:36	-145.61	18166
077 06:50:50	-170.91	18167
077 08:32:05	163.77	18168
077 10:13:19	138.47	18169
077 11:54:34	113.15	18170
077 13:35:49	87.83	18171
077 15:17:03	62.53	18172
077 16:58:18	37.21	18173
077 18:39:32	11.91	18174
077 20:20:47	-13.41	18175
077 22:02:02	-38.72	18176
077 23:43:16	-64.02	18177

077 01:04:35	-166.73	7610
077 02:46:42	167.73	7611
077 04:28:48	142.21	7612
077 06:10:54	116.69	7613
077 07:53:01	91.16	7614
077 09:35:07	65.64	7615
077 11:17:13	40.11	7616
077 12:59:20	14.58	7617
077 14:41:26	-10.94	7618
077 16:23:32	-36.46	7619
077 18:05:39	-62.00	7620
077 19:47:45	-87.52	7621
077 21:29:51	-113.04	7622
077 23:11:58	-138.57	7623

078 01:14:44	-119.62	27126
078 02:56:45	-145.12	27127
078 04:38:47	-170.62	27128
078 06:20:49	163.87	27129
078 08:02:51	138.36	27130
078 09:44:53	112.85	27131
078 11:26:55	87.35	27132
078 13:08:56	61.85	27133
078 14:50:58	36.34	27134
078 16:33:00	10.84	27135
078 18:15:02	-14.67	27136
078 19:57:04	-40.18	27137
078 21:39:06	-65.69	27138
078 23:21:07	-91.18	27139

078 01:24:31	-89.34	18178
078 03:05:45	-114.64	18179
078 04:47:00	-139.96	18180
078 06:28:15	-165.28	18181
078 08:09:29	169.42	18182
078 09:50:44	144.10	18183
078 11:31:59	118.79	18184
078 13:13:13	93.48	18185
078 14:54:28	68.17	18186
078 16:35:42	42.86	18187
078 18:16:57	17.55	18188
078 19:58:12	-7.77	18189
078 21:39:26	-33.07	18190
078 23:20:41	-58.39	18191

078 00:54:04	-164.10	7624
078 02:36:10	170.38	7625
078 04:18:17	144.85	7626
078 06:00:23	119.33	7627
078 07:42:29	93.81	7628
078 09:24:36	68.27	7629
078 11:06:42	42.75	7630
078 12:48:48	17.23	7631
078 14:30:55	-8.31	7632
078 16:13:01	-33.83	7633
078 17:55:07	-59.35	7634
078 19:37:14	-84.88	7635
078 21:19:20	-110.40	7636
078 23:01:26	-135.93	7637

**SATELLITE C2**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

079 01:42:01	-125.02	35044
079 03:26:53	-151.37	35045
079 05:11:45	-177.71	35046
079 06:56:37	155.95	35047
079 08:41:29	129.61	35048
079 10:26:21	103.26	35049
079 12:11:13	76.92	35050
079 13:56:05	50.58	35051
079 15:40:57	24.24	35052
079 17:25:49	-2.11	35053
079 19:10:41	-28.45	35054
079 20:55:33	-54.79	35055
079 22:40:25	-81.13	35056

**SATELLITE C3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

079 00:51:34	-62.22	28783
079 02:36:29	-88.57	28784
079 04:21:24	-114.93	28785
079 06:06:19	-141.28	28786
079 07:51:14	-167.64	28787
079 09:36:09	166.00	28788
079 11:21:05	139.65	28789
079 13:06:00	113.30	28790
079 14:50:55	86.94	28791
079 16:35:50	60.58	28792
079 18:20:45	34.23	28793
079 20:05:40	7.87	28794
079 21:50:36	-18.48	28795
079 23:35:31	-44.84	28796

**SATELLITE C4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

079 00:22:54	167.82	3548
079 02:07:48	141.47	3549
079 03:52:42	115.12	3550
079 05:37:36	88.77	3551
079 07:22:30	62.42	3552
079 09:07:24	36.07	3553
079 10:52:18	9.72	3554
079 12:37:12	-16.63	3555
079 14:22:06	-42.98	3556
079 16:07:00	-69.33	3557
079 17:51:54	-95.68	3558
079 19:36:48	-122.03	3559
079 21:21:42	-148.38	3560
079 23:06:36	-174.73	3561

080 00:25:17	-107.47	35057
080 02:10:09	-133.82	35058
080 03:55:01	-160.16	35059
080 05:39:53	173.50	35060
080 07:24:45	147.16	35061
080 09:09:37	120.81	35062
080 10:54:29	94.47	35063
080 12:39:21	68.13	35064
080 14:24:13	41.79	35065
080 16:09:05	15.44	35066
080 17:53:57	-10.90	35067
080 19:38:49	-37.24	35068
080 21:23:41	-63.58	35069
080 23:08:33	-89.92	35070

080 01:20:26	-71.19	28797
080 03:05:21	-97.55	28798
080 04:50:16	-123.90	28799
080 06:35:11	-150.26	28800
080 08:20:06	-176.61	28801
080 10:05:02	157.03	28802
080 11:49:57	130.68	28803
080 13:34:52	104.32	28804
080 15:19:47	77.96	28805
080 17:04:42	51.61	28806
080 18:49:37	25.25	28807
080 20:34:33	-1.10	28808
080 22:19:28	-27.46	28809

080 00:51:30	158.92	3562
080 02:36:24	132.57	3563
080 04:21:18	106.22	3564
080 06:06:12	79.86	3565
080 07:51:06	53.51	3566
080 09:36:00	27.16	3567
080 11:20:54	-8.81	3568
080 13:05:48	-25.54	3569
080 14:50:42	-51.89	3570
080 16:35:36	-78.24	3571
080 18:20:30	-104.59	3572
080 20:05:24	-130.94	3573
080 21:50:18	-157.29	3574
080 23:35:12	176.36	3575

081 00:53:25	-116.27	35071
081 02:38:17	-142.61	35072
081 04:23:09	-168.95	35073
081 06:08:01	164.71	35074
081 07:52:53	138.36	35075
081 09:37:45	112.02	35076
081 11:22:37	85.68	35077
081 13:07:29	59.34	35078
081 14:52:21	32.99	35079
081 16:37:13	6.65	35080
081 18:22:05	-19.69	35081
081 20:06:57	-46.03	35082
081 21:51:49	-72.38	35083
081 23:36:41	-98.72	35084

081 00:04:23	-53.81	28810
081 01:49:18	-80.17	28811
081 03:34:13	-106.52	28812
081 05:19:08	-132.88	28813
081 07:04:03	-159.23	28814
081 08:48:59	174.41	28815
081 10:33:54	148.06	28816
081 12:18:49	121.70	28817
081 14:03:44	95.35	28818
081 15:48:39	68.99	28819
081 17:33:34	42.63	28820
081 19:18:30	16.28	28821
081 21:03:25	-10.07	28822
081 22:48:20	-36.43	28823

081 01:20:06	150.01	3576
081 03:05:00	123.66	3577
081 04:49:54	97.31	3578
081 06:34:48	70.96	3579
081 08:19:42	44.61	3580
081 10:04:36	18.26	3581
081 11:49:30	-8.09	3582
081 13:34:24	-34.44	3583
081 15:19:18	-60.79	3584
081 17:04:12	-87.14	3585
081 18:49:06	-113.49	3586
081 20:34:00	-139.84	3587
081 22:18:54	-166.20	3588

082 01:21:33	-125.06	35085
082 03:06:25	-151.40	35086
082 04:51:17	-177.74	35087
082 06:36:09	155.91	35088
082 08:21:01	129.57	35089
082 10:05:53	103.23	35090
082 11:50:45	76.89	35091
082 13:35:37	50.54	35092
082 15:20:29	24.20	35093
082 17:05:21	-2.14	35094
082 18:50:13	-28.48	35095
082 20:35:05	-54.83	35096
082 22:19:57	-81.17	35097

082 00:33:15	-62.79	28824
082 02:18:10	-89.14	28825
082 04:03:05	-115.50	28826
082 05:48:00	-141.85	28827
082 07:32:56	-168.21	28828
082 09:17:51	165.44	28829
082 11:02:46	139.08	28830
082 12:47:41	112.73	28831
082 14:32:36	86.37	28832
082 16:17:31	60.01	28833
082 18:02:27	33.66	28834
082 19:47:22	7.31	28835
082 21:32:17	-19.05	28836
082 23:17:12	-45.41	28837

082 00:03:48	167.45	3589
082 01:48:42	141.10	3590
082 03:33:36	114.75	3591
082 05:18:30	88.40	3592
082 07:03:24	62.05	3593
082 08:48:18	35.70	3594
082 10:33:12	9.35	3595
082 12:18:06	-17.00	3596
082 14:03:00	-43.35	3597
082 15:47:54	-69.70	3598
082 17:32:48	-96.05	3599
082 19:17:42	-122.40	3600
082 21:02:36	-148.75	3601
082 22:47:30	-175.10	3602

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT
day hr mn sc	deg	dg		day hr mn sc	deg	dg		day hr mn sc	deg	dg	
079 01:03:09	-116.69	27140		079 01:01:55	-83.69	18192		079 00:43:33	-161.46	7638	
079 02:45:11	-142.19	27141		079 02:43:10	-109.01	18193		079 02:25:39	173.02	7639	
079 04:27:13	-167.70	27142		079 04:24:25	-134.33	18194		079 04:07:45	147.50	7640	
079 06:09:15	166.79	27143		079 06:05:39	-159.63	18195		079 05:49:52	121.96	7641	
079 07:51:17	141.28	27144		079 07:46:54	175.06	18196		079 07:31:58	96.44	7642	
079 09:33:18	115.79	27145		079 09:28:03	149.75	18197		079 09:14:04	70.92	7643	
079 11:15:20	90.28	27146		079 11:09:23	124.44	18198		079 10:56:11	45.39	7644	
079 12:57:22	64.77	27147		079 12:50:38	99.12	18199		079 12:38:17	19.86	7645	
079 14:39:24	39.27	27148		079 14:31:52	73.82	18200		079 14:20:23	-5.66	7646	
079 16:21:26	13.76	27149		079 16:13:07	48.50	18201		079 16:02:30	-31.19	7647	
079 18:03:28	-11.75	27150		079 17:54:21	23.20	18202		079 17:44:36	-56.71	7648	
079 19:45:29	-37.24	27151		079 19:35:36	-2.12	18203		079 19:26:42	-82.23	7649	
079 21:27:31	-62.75	27152		079 21:16:51	-27.44	18204		079 21:08:49	-107.77	7650	
079 23:09:33	-88.26	27153		079 22:58:05	-52.74	18205		079 22:50:55	-133.29	7651	
080 00:51:35	-113.76	27154		080 00:39:20	-78.06	18206		080 00:33:01	-158.81	7652	
080 02:33:37	-139.27	27155		080 02:20:34	-103.36	18207		080 02:15:08	175.65	7653	
080 04:15:39	-164.78	27156		080 04:01:49	-128.68	18208		080 03:57:14	150.13	7654	
080 05:57:40	169.73	27157		080 05:43:04	-153.99	18209		080 05:39:20	124.61	7655	
080 07:39:42	144.22	27158		080 07:24:18	-179.30	18210		080 07:21:27	99.08	7656	
080 09:21:44	118.71	27159		080 09:05:33	155.39	18211		080 09:03:33	73.56	7657	
080 11:03:46	93.20	27160		080 10:46:47	130.08	18212		080 10:45:39	48.03	7658	
080 12:45:48	67.70	27161		080 12:28:02	104.77	18213		080 12:27:46	22.50	7659	
080 14:27:50	42.19	27162		080 14:09:17	79.45	18214		080 14:09:52	-3.02	7660	
080 16:09:51	16.70	27163		080 15:50:31	54.15	18215		080 15:51:58	-28.54	7661	
080 17:51:53	-8.81	27164		080 17:31:46	28.83	18216		080 17:34:05	-54.08	7662	
080 19:33:55	-34.32	27165		080 19:13:01	3.52	18217		080 19:16:11	-79.60	7663	
080 21:15:57	-59.83	27166		080 20:54:15	-21.79	18218		080 20:58:17	-105.12	7664	
080 22:57:59	-85.33	27167		080 22:35:30	-47.10	18219		080 22:40:24	-130.65	7665	
081 00:40:01	-110.84	27168		081 00:16:44	-72.41	18220		081 00:22:30	-156.17	7666	
081 02:22:02	-136.34	27169		081 01:57:59	-97.72	18221		081 02:04:36	178.30	7667	
081 04:04:04	-161.84	27170		081 03:39:14	-123.04	18222		081 03:46:43	152.77	7668	
081 05:46:06	172.65	27171		081 05:20:28	-148.34	18223		081 05:28:49	127.25	7669	
081 07:28:08	147.14	27172		081 07:01:43	-173.66	18224		081 07:10:55	101.73	7670	
081 09:10:10	121.63	27173		081 08:42:57	161.04	18225		081 08:53:02	76.19	7671	
081 10:52:12	96.13	27174		081 10:24:12	135.72	18226		081 10:35:08	50.67	7672	
081 12:34:13	70.63	27175		081 12:05:27	110.40	18227		081 12:17:14	25.15	7673	
081 14:16:15	45.13	27176		081 13:46:41	85.10	18228		081 13:59:21	-3.38	7674	
081 15:58:17	19.62	27177		081 15:27:56	59.78	18229		081 15:41:27	-25.91	7675	
081 17:40:19	-5.89	27178		081 17:09:10	34.48	18230		081 17:23:34	-51.44	7676	
081 19:22:21	-31.40	27179		081 18:50:25	9.16	18231		081 19:05:40	-76.96	7677	
081 21:04:23	-56.90	27180		081 20:31:40	-16.15	18232		081 20:47:46	-102.48	7678	
081 22:46:24	-82.40	27181		081 22:12:54	-41.46	18233		081 22:29:53	-128.02	7679	
				081 23:54:09	-66.77	18234					
082 00:28:26	-107.91	27182		082 01:35:23	-92.07	18235		082 00:11:59	-153.54	7680	
082 02:10:28	-133.41	27183		082 03:16:38	-117.39	18236		082 01:54:05	-179.06	7681	
082 03:52:30	-158.92	27184		082 04:57:53	-142.71	18237		082 03:36:12	155.41	7682	
082 05:34:32	175.57	27185		082 06:39:07	-168.01	18238		082 05:18:18	129.88	7683	
082 07:16:34	150.06	27186		082 08:20:22	166.67	18239		082 07:00:24	104.36	7684	
082 08:58:35	124.57	27187		082 10:01:36	141.37	18240		082 08:42:31	78.83	7685	
082 10:40:37	99.06	27188		082 11:42:51	116.05	18241		082 10:24:37	53.31	7686	
082 12:22:39	73.56	27189		082 13:24:06	90.74	18242		082 12:06:43	27.79	7687	
082 14:04:41	48.05	27190		082 15:05:20	65.43	18243		082 13:48:50	2.25	7688	
082 15:46:43	22.54	27191		082 16:46:35	40.12	18244		082 15:30:56	-23.27	7689	
082 17:28:45	-2.97	27192		082 18:27:50	14.80	18245		082 17:13:02	-48.79	7690	
082 19:10:46	-28.46	27193		082 20:09:04	-10.50	18246		082 18:55:09	-74.33	7691	
082 20:52:48	-53.97	27194		082 21:50:19	-35.82	18247		082 20:37:15	-99.85	7692	
082 22:34:50	-79.48	27195		082 23:31:33	-61.12	18248		082 22:19:21	-125.37	7693	

**SATELLITE C2**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

083 00:04:49	-107.51	35098
083 01:49:41	-133.85	35099
083 03:34:33	-160.19	35100
083 05:19:25	173.46	35101
083 07:04:17	147.12	35102
083 08:49:09	120.78	35103
083 10:34:01	94.44	35104
083 12:18:53	68.09	35105
083 14:03:45	41.75	35106
083 15:48:37	15.41	35107
083 17:33:29	-10.93	35108
083 19:18:21	-37.28	35109
083 21:03:13	-63.62	35110
083 22:48:05	-89.96	35111

**SATELLITE C3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

083 01:02:07	-71.76	28838
083 02:47:02	-98.12	28839
083 04:31:58	-124.47	28840
083 06:16:53	-150.83	28841
083 08:01:48	-177.18	28842
083 09:46:43	156.46	28843
083 11:31:38	130.11	28844
083 13:16:33	103.75	28845
083 15:01:28	77.39	28846
083 16:46:24	51.04	28847
083 18:31:19	24.69	28848
083 20:16:14	-1.67	28849
083 22:01:09	-28.03	28850
083 23:46:04	-54.38	28851

**SATELLITE C4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

083 00:32:24	158.55	3603
083 02:17:18	132.20	3604
083 04:02:12	105.85	3605
083 05:47:06	79.50	3606
083 07:32:00	53.15	3607
083 09:16:54	26.80	3608
083 11:01:48	-45	3609
083 12:46:42	-25.91	3610
083 14:31:36	-52.26	3611
083 16:16:30	-78.61	3612
083 18:01:24	-104.96	3613
083 19:46:18	-131.31	3614
083 21:31:12	-157.66	3615
083 23:16:06	175.99	3616

084 00:32:57	-116.30	35112
084 02:17:49	-142.64	35113
084 04:02:41	-168.99	35114
084 05:47:33	164.67	35115
084 07:32:25	138.33	35116
084 09:17:17	111.99	35117
084 11:02:09	85.64	35118
084 12:47:01	59.30	35119
084 14:31:53	32.96	35120
084 16:16:45	6.62	35121
084 18:01:37	-19.73	35122
084 19:46:29	-46.07	35123
084 21:31:21	-72.41	35124
084 23:16:13	-98.75	35125

084 01:30:59	-80.74	28852
084 03:15:55	-107.09	28853
084 05:00:50	-133.45	28854
084 06:45:45	-159.80	28855
084 08:30:40	173.84	28856
084 10:15:35	147.49	28857
084 12:00:30	121.13	28858
084 13:45:25	94.78	28859
084 15:30:21	68.42	28860
084 17:15:16	42.07	28861
084 19:00:11	15.71	28862
084 20:45:06	-10.65	28863
084 22:30:01	-37.00	28864

084 01:01:00	149.64	3617
084 02:45:54	123.29	3618
084 04:30:48	96.94	3619
084 06:15:42	70.59	3620
084 08:00:36	44.24	3621
084 09:45:30	17.89	3622
084 11:30:24	-8.46	3623
084 13:15:18	-34.81	3624
084 15:00:12	-61.16	3625
084 16:45:06	-87.51	3626
084 18:30:00	-113.86	3627
084 20:14:54	-140.21	3628
084 21:59:48	-166.56	3629
084 23:44:42	167.09	3630

085 01:01:05	-125.09	35126
085 02:45:57	-151.44	35127
085 04:30:49	-177.78	35128
085 06:15:41	155.88	35129
085 08:00:33	129.54	35130
085 09:45:25	103.19	35131
085 11:30:17	76.85	35132
085 13:15:09	50.51	35133
085 15:00:01	24.17	35134
085 16:44:53	-2.18	35135
085 18:29:45	-28.52	35136
085 20:14:37	-54.86	35137
085 21:59:29	-81.20	35138
085 23:44:21	-107.54	35139

085 00:14:56	-63.36	28865
085 01:59:52	-89.71	28866
085 03:44:47	-116.07	28867
085 05:29:42	-142.42	28868
085 07:14:37	-168.78	28869
085 08:59:32	164.87	28870
085 10:44:27	138.51	28871
085 12:29:22	112.16	28872
085 14:14:18	85.80	28873
085 15:59:13	59.45	28874
085 17:44:08	33.09	28875
085 19:29:03	6.74	28876
085 21:13:58	-19.62	28877
085 22:58:53	-45.98	28878

085 01:29:36	140.74	3631
085 03:14:30	114.38	3632
085 04:59:24	88.03	3633
085 06:44:18	61.68	3634
085 08:29:12	35.33	3635
085 10:14:06	8.98	3636
085 11:59:00	-17.37	3637
085 13:43:54	-43.72	3638
085 15:28:48	-70.07	3639
085 17:13:42	-96.42	3640
085 18:58:36	-122.77	3641
085 20:43:30	-149.12	3642
085 22:28:24	-175.47	3643

086 01:29:13	-133.89	35140
086 03:14:05	-160.23	35141
086 04:58:57	173.43	35142
086 06:43:49	147.09	35143
086 08:28:41	120.74	35144
086 10:13:33	94.40	35145
086 11:58:25	68.06	35146
086 13:43:17	41.72	35147
086 15:28:09	15.37	35148
086 17:13:01	-10.97	35149
086 18:57:53	-37.31	35150
086 20:42:45	-63.65	35151
086 22:27:37	-89.99	35152

086 00:43:49	-72.33	28879
086 02:28:44	-98.68	28880
086 04:13:39	-125.04	28881
086 05:58:34	-151.40	28882
086 07:43:29	-177.75	28883
086 09:28:24	155.89	28884
086 11:13:20	129.54	28885
086 12:58:15	103.18	28886
086 14:43:10	76.83	28887
086 16:28:05	50.47	28888
086 18:13:00	24.12	28889
086 19:57:55	-2.24	28890
086 21:42:50	-28.60	28891
086 23:27:46	-54.95	28892

086 00:13:18	158.18	3644
086 01:58:12	131.83	3645
086 03:43:06	105.48	3646
086 05:28:00	79.13	3647
086 07:12:54	52.78	3648
086 08:57:48	26.43	3649
086 10:42:42	.08	3650
086 12:27:36	-26.27	3651
086 14:12:30	-52.62	3652
086 15:57:24	-78.98	3653
086 17:42:18	-105.33	3654
086 19:27:12	-131.68	3655
086 21:12:06	-158.03	3656
086 22:57:00	175.62	3657

**SATELLITE S2**

**Ascending Node Predictions**  
**Predicting for 182 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

083 00:16:52	-104.98	27196
083 01:58:54	-130.49	27197
083 03:40:56	-156.00	27198
083 05:22:58	178.49	27199
083 07:04:59	153.00	27200
083 08:47:01	127.49	27201
083 10:29:03	101.99	27202
083 12:11:05	76.48	27203
083 13:53:07	50.97	27204
083 15:35:09	25.46	27205
083 17:17:10	-0.03	27206
083 18:59:12	-25.54	27207
083 20:41:14	-51.05	27208
083 22:23:16	-76.55	27209

**SATELLITE S3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

083 01:12:48	-86.44	18249
083 02:54:03	-111.76	18250
083 04:35:17	-137.06	18251
083 06:16:32	-162.38	18252
083 07:57:46	172.32	18253
083 09:39:01	147.01	18254
083 11:20:16	121.69	18255
083 13:01:30	96.39	18256
083 14:42:45	71.07	18257
083 16:23:59	45.77	18258
083 18:05:14	20.45	18259
083 19:46:29	-4.87	18260
083 21:27:43	-30.17	18261
083 23:08:58	-55.49	18262

**SATELLITE S4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

083 00:01:28	-150.90	7694
083 01:43:34	-176.42	7695
083 03:25:40	158.05	7696
083 05:07:47	132.52	7697
083 06:49:53	107.00	7698
083 08:31:59	81.48	7699
083 10:14:06	55.94	7700
083 11:56:12	30.42	7701
083 13:38:18	4.90	7702
083 15:20:25	-20.63	7703
083 17:02:31	-46.16	7704
083 18:44:37	-71.68	7705
083 20:26:44	-97.21	7706
083 22:08:50	-122.73	7707
083 23:50:56	-148.25	7708

084 00:05:18	-102.06	27210
084 01:47:20	-127.57	27211
084 03:29:21	-153.06	27212
084 05:11:23	-178.57	27213
084 06:53:25	155.92	27214
084 08:35:27	130.42	27215
084 10:17:29	104.91	27216
084 11:59:31	79.40	27217
084 13:41:32	53.91	27218
084 15:23:34	28.40	27219
084 17:05:36	2.89	27220
084 18:47:38	-22.62	27221
084 20:29:40	-48.12	27222
084 22:11:42	-73.63	27223
084 23:53:43	-99.12	27224

084 00:50:12	-80.79	18263
084 02:31:27	-106.11	18264
084 04:12:42	-131.42	18265
084 05:53:56	-156.73	18266
084 07:35:11	177.96	18267
084 09:16:25	152.65	18268
084 10:57:40	127.34	18269
084 12:38:55	102.02	18270
084 14:20:09	76.72	18271
084 16:01:24	51.40	18272
084 17:42:38	26.10	18273
084 19:23:53	.78	18274
084 21:05:08	-24.53	18275
084 22:46:22	-49.84	18276

084 01:33:03	-173.79	7709
084 03:15:09	160.69	7710
084 04:57:15	135.17	7711
084 06:39:22	109.63	7712
084 08:21:28	84.11	7713
084 10:03:34	58.59	7714
084 11:45:41	33.06	7715
084 13:27:47	7.54	7716
084 15:09:53	-17.98	7717
084 16:52:00	-43.52	7718
084 18:34:06	-69.04	7719
084 20:16:12	-94.56	7720
084 21:58:19	-120.10	7721
084 23:40:25	-145.62	7722

085 01:35:45	-124.63	27225
085 03:17:47	-150.14	27226
085 04:59:49	-175.65	27227
085 06:41:51	158.85	27228
085 08:23:53	133.34	27229
085 10:05:54	107.84	27230
085 11:47:56	82.34	27231
085 13:29:58	56.83	27232
085 15:12:00	31.32	27233
085 16:54:02	5.82	27234
085 18:36:04	-19.69	27235
085 20:18:06	-45.20	27236
085 22:00:07	-70.69	27237
085 23:42:09	-96.20	27238

085 00:27:37	-75.15	18277
085 02:08:52	-100.47	18278
085 03:50:06	-125.77	18279
085 05:31:21	-151.09	18280
085 07:12:35	-176.39	18281
085 08:53:50	158.29	18282
085 10:35:05	132.97	18283
085 12:16:19	107.67	18284
085 13:57:34	82.35	18285
085 15:38:48	57.05	18286
085 17:20:03	31.73	18287
085 19:01:18	6.42	18288
085 20:42:32	-18.89	18289
085 22:23:47	-44.20	18290

085 01:22:31	-171.14	7723
085 03:04:38	163.33	7724
085 04:46:44	137.81	7725
085 06:28:50	112.28	7726
085 08:10:57	86.75	7727
085 09:53:03	61.23	7728
085 11:35:09	35.71	7729
085 13:17:16	10.17	7730
085 14:59:22	-15.35	7731
085 16:41:28	-40.87	7732
085 18:23:35	-66.40	7733
085 20:05:41	-91.93	7734
085 21:47:47	-117.45	7735
085 23:29:54	-142.98	7736

086 01:24:11	-121.71	27239
086 03:06:13	-147.22	27240
086 04:48:15	-172.72	27241
086 06:30:17	161.77	27242
086 08:12:18	136.28	27243
086 09:54:20	110.77	27244
086 11:36:22	85.26	27245
086 13:18:24	59.75	27246
086 15:00:26	34.25	27247
086 16:42:28	8.74	27248
086 18:24:29	-16.76	27249
086 20:06:31	-42.26	27250
086 21:48:33	-67.77	27251
086 23:30:35	-93.28	27252

086 00:05:01	-69.51	18291
086 01:46:16	-94.82	18292
086 03:27:31	-120.14	18293
086 05:08:45	-145.44	18294
086 06:50:00	-170.76	18295
086 08:31:14	163.94	18296
086 10:12:29	138.62	18297
086 11:53:44	113.31	18298
086 13:34:58	88.00	18299
086 15:16:13	62.69	18300
086 16:57:27	37.38	18301
086 18:38:42	12.07	18302
086 20:19:57	-13.25	18303
086 22:01:11	-38.55	18304
086 23:42:26	-63.87	18305

086 01:12:00	-168.50	7737
086 02:54:06	165.98	7738
086 04:36:13	140.44	7739
086 06:18:19	114.92	7740
086 08:00:25	89.40	7741
086 09:42:32	63.86	7742
086 11:24:38	38.34	7743
086 13:06:44	12.82	7744
086 14:48:51	-12.71	7745
086 16:30:57	-38.23	7746
086 18:13:03	-63.76	7747
086 19:55:10	-89.29	7748
086 21:37:16	-114.81	7749
086 23:19:22	-140.33	7750

**SATELLITE C2**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

087 00:12:29	-116.34	35153
087 01:57:21	-142.68	35154
087 03:42:13	-169.02	35155
087 05:27:05	164.64	35156
087 07:11:57	138.29	35157
087 08:56:49	111.95	35158
087 10:41:41	85.61	35159
087 12:26:33	59.27	35160
087 14:11:25	32.92	35161
087 15:56:17	6.58	35162
087 17:41:09	-19.76	35163
087 19:26:01	-46.10	35164
087 21:10:53	-72.44	35165
087 22:55:45	-98.79	35166

**SATELLITE C3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

087 01:12:41	-81.30	28893
087 02:57:36	-107.66	28894
087 04:42:31	-134.02	28895
087 06:27:26	-160.37	28896
087 08:12:21	173.27	28897
087 09:57:17	146.92	28898
087 11:42:12	120.56	28899
087 13:27:07	94.21	28900
087 15:12:02	67.85	28901
087 16:56:57	41.50	28902
087 18:41:52	15.14	28903
087 20:26:47	-11.22	28904
087 22:11:43	-37.57	28905
087 23:56:38	-63.92	28906

**SATELLITE C4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT)**    **E LONG**    **ORBIT**  
**day hr mn sc**    **deg dg**

087 00:41:54	149.27	3658
087 02:26:48	122.92	3659
087 04:11:42	96.57	3660
087 05:56:36	70.22	3661
087 07:41:30	43.87	3662
087 09:26:24	17.52	3663
087 11:11:18	-8.83	3664
087 12:56:12	-35.18	3665
087 14:41:06	-61.53	3666
087 16:26:00	-87.88	3667
087 18:10:54	-114.23	3668
087 19:55:48	-140.58	3669
087 21:40:42	166.93	3670
087 23:25:36	166.72	3671

088 00:40:37	-125.13	35167
088 02:25:29	-151.47	35168
088 04:10:21	-177.81	35169
088 05:55:13	155.84	35170
088 07:40:05	129.50	35171
088 09:24:57	103.16	35172
088 11:09:49	76.82	35173
088 12:54:41	50.47	35174
088 14:39:33	24.13	35175
088 16:24:25	-2.21	35176
088 18:09:17	-28.55	35177
088 19:54:09	-54.89	35178
088 21:39:01	-81.24	35179
088 23:23:53	-107.58	35180

088 01:41:33	-90.28	28907
088 03:26:28	-116.64	28908
088 05:11:23	-142.99	28909
088 06:56:18	-169.35	28910
088 08:41:14	164.30	28911
088 10:26:09	137.94	28912
088 12:11:04	111.59	28913
088 13:55:59	85.23	28914
088 15:40:54	58.88	28915
088 17:25:49	32.52	28916
088 19:10:45	6.17	28917
088 20:55:40	-20.19	28918
088 22:40:35	-46.54	28919

088 01:10:30	140.37	3672
088 02:55:24	114.01	3673
088 04:40:18	87.66	3674
088 06:25:12	61.31	3675
088 08:10:06	34.96	3676
088 09:55:00	8.61	3677
088 11:39:54	-17.74	3678
088 13:24:48	-44.09	3679
088 15:09:42	-70.44	3680
088 16:54:36	-96.79	3681
088 18:39:30	-123.14	3682
088 20:24:24	-149.49	3683
088 22:09:18	-175.84	3684
088 23:54:12	157.81	3685

089 01:08:45	-133.92	35181
089 02:53:37	-160.26	35182
089 04:38:29	173.39	35183
089 06:23:21	147.05	35184
089 08:08:13	120.71	35185
089 09:53:05	94.37	35186
089 11:37:57	68.02	35187
089 13:22:49	41.68	35188
089 15:07:41	15.34	35189
089 16:52:33	-11.00	35190
089 18:37:25	-37.35	35191
089 20:22:17	-63.69	35192
089 22:07:09	-90.03	35193
089 23:52:01	-116.37	35194

089 00:25:30	-72.90	28920
089 02:10:25	-99.26	28921
089 03:55:20	-125.61	28922
089 05:40:15	-151.97	28923
089 07:25:11	-178.32	28924
089 09:10:06	155.32	28925
089 10:55:01	128.97	28926
089 12:39:56	102.61	28927
089 14:24:51	76.26	28928
089 16:09:46	49.90	28929
089 17:54:42	23.55	28930
089 19:39:37	-2.81	28931
089 21:24:32	-29.16	28932
089 23:09:27	-55.52	28933

089 01:39:06	131.46	3686
089 03:24:00	105.11	3687
089 05:08:54	78.76	3688
089 06:53:48	52.41	3689
089 08:38:42	26.06	3690
089 10:23:36	-29	3691
089 12:08:30	-26.64	3692
089 13:53:24	-53.00	3693
089 15:38:18	-79.35	3694
089 17:23:12	-105.70	3695
089 19:08:06	-132.05	3696
089 20:53:00	-158.40	3697
089 22:37:54	175.25	3698

090 01:36:53	-142.71	35195
090 03:21:45	-169.06	35196
090 05:06:37	164.60	35197
090 06:51:29	138.26	35198
090 08:36:21	111.92	35199
090 10:21:13	85.57	35200
090 12:06:05	59.23	35201
090 13:50:57	32.89	35202
090 15:35:49	6.55	35203
090 17:20:41	-19.80	35204
090 19:05:33	-46.14	35205
090 20:50:25	-72.48	35206
090 22:35:17	-98.82	35207

090 00:54:22	-81.88	28934
090 02:39:17	-108.23	28935
090 04:24:12	-134.59	28936
090 06:09:08	-160.94	28937
090 07:54:03	172.70	28938
090 09:38:58	146.35	28939
090 11:23:53	119.99	28940
090 13:08:48	93.64	28941
090 14:53:43	67.28	28942
090 16:38:39	40.93	28943
090 18:23:34	14.57	28944
090 20:08:29	-11.78	28945
090 21:53:24	-38.14	28946
090 23:38:19	-64.49	28947

090 00:22:48	148.90	3699
090 02:07:42	122.55	3700
090 03:52:36	96.20	3701
090 05:37:30	69.85	3702
090 07:22:24	43.50	3703
090 09:07:18	17.15	3704
090 10:52:12	-9.20	3705
090 12:37:06	-35.55	3706
090 14:22:00	-61.90	3707
090 16:06:54	-88.25	3708
090 17:51:48	-114.60	3709
090 19:36:42	-140.95	3710
090 21:21:36	-167.30	3711
090 23:06:30	166.35	3712

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT		TIME (GMT)	E LONG	ORBIT	
day hr mn sc	deg dg			day hr mn sc	deg dg			day hr mn sc	deg dg		
087 01:12:37	-118.79	27253		087 01:23:40	-89.17	18306		087 01:01:29	-165.87	7751	
087 02:54:39	-144.29	27254		087 03:04:55	-114.49	18307		087 02:43:35	168.61	7752	
087 04:36:40	-169.79	27255		087 04:46:10	-139.81	18308		087 04:25:41	143.09	7753	
087 06:18:42	164.71	27256		087 06:27:24	-165.11	18309		087 06:07:48	117.56	7754	
087 08:00:44	139.20	27257		087 08:08:39	169.57	18310		087 07:49:54	92.03	7755	
087 09:42:46	113.69	27258		087 09:49:53	144.27	18311		087 09:32:00	66.51	7756	
087 11:24:48	88.18	27259		087 11:31:08	118.95	18312		087 11:14:07	40.98	7757	
087 13:06:50	62.68	27260		087 13:12:23	93.64	18313		087 12:56:13	15.46	7758	
087 14:48:51	37.18	27261		087 14:53:37	68.33	18314		087 14:38:19	-10.06	7759	
087 16:30:53	11.67	27262		087 16:34:52	43.02	18315		087 16:20:26	-35.60	7760	
087 18:12:55	-13.83	27263		087 18:16:07	17.70	18316		087 18:02:32	-61.12	7761	
087 19:54:57	-39.34	27264		087 19:57:21	-7.60	18317		087 19:44:38	-86.64	7762	
087 21:36:59	-64.85	27265		087 21:38:36	-32.92	18318		087 21:26:45	-112.18	7763	
087 23:19:01	-90.36	27266		087 23:19:50	-58.22	18319		087 23:08:51	-137.70	7764	
088 01:01:02	-115.85	27267		088 01:01:05	-83.54	18320		088 00:50:57	-163.22	7765	
088 02:43:04	-141.36	27268		088 02:42:20	-108.85	18321		088 02:33:04	171.25	7766	
088 04:25:06	-166.86	27269		088 04:23:34	-134.16	18322		088 04:15:10	145.73	7767	
088 06:07:08	167.63	27270		088 06:04:49	-159.47	18323		088 05:57:16	120.20	7768	
088 07:49:10	142.12	27271		088 07:46:03	175.22	18324		088 07:39:23	94.67	7769	
088 09:31:12	116.61	27272		088 09:27:18	149.91	18325		088 09:21:29	69.15	7770	
088 11:13:14	91.11	27273		088 11:08:33	124.59	18326		088 11:03:35	43.63	7771	
088 12:55:15	65.61	27274		088 12:49:47	99.29	18327		088 12:45:42	18.09	7772	
088 14:37:17	40.10	27275		088 14:31:02	73.97	18328		088 14:27:48	-7.43	7773	
088 16:19:19	14.60	27276		088 16:12:16	48.67	18329		088 16:09:54	-32.95	7774	
088 18:01:21	-10.91	27277		088 17:53:31	23.35	18330		088 17:52:01	-58.48	7775	
088 19:43:23	-36.42	27278		088 19:34:46	-1.97	18331		088 19:34:07	-84.01	7776	
088 21:25:25	-61.92	27279		088 21:16:00	-27.27	18332		088 21:16:13	-109.53	7777	
088 23:07:26	-87.42	27280		088 22:57:15	-52.59	18333		088 22:58:20	-135.06	7778	
089 00:49:28	-112.93	27281		089 00:38:29	-77.89	18334		089 00:40:26	-160.58	7779	
089 02:31:30	-138.43	27282		089 02:19:44	-103.20	18335		089 02:22:32	173.90	7780	
089 04:13:32	-163.94	27283		089 04:00:59	-128.52	18336		089 04:04:39	148.36	7781	
089 05:55:34	170.55	27284		089 05:42:13	-153.82	18337		089 05:46:45	122.84	7782	
089 07:37:36	145.04	27285		089 07:23:28	-179.14	18338		089 07:28:51	97.32	7783	
089 09:19:37	119.55	27286		089 09:04:42	155.56	18339		089 09:10:58	71.78	7784	
089 11:01:39	94.04	27287		089 10:45:57	130.24	18340		089 10:53:04	46.26	7785	
089 12:43:41	68.54	27288		089 12:27:12	104.92	18341		089 12:35:10	20.74	7786	
089 14:25:43	43.03	27289		089 14:08:26	79.62	18342		089 14:17:17	-4.79	7787	
089 16:07:45	17.52	27290		089 15:49:41	54.30	18343		089 15:59:23	-30.31	7788	
089 17:49:47	-7.99	27291		089 17:30:55	29.00	18344		089 17:41:29	-55.83	7789	
089 19:31:48	-33.48	27292		089 19:12:10	3.68	18345		089 19:23:36	-81.37	7790	
089 21:13:50	-58.99	27293		089 20:53:25	-21.63	18346		089 21:05:42	-106.89	7791	
089 22:55:52	-84.50	27294		089 22:34:39	-46.94	18347		089 22:47:48	-132.41	7792	
090 00:37:54	-110.00	27295		090 00:15:54	-72.25	18348		090 00:29:55	-157.95	7793	
090 02:19:56	-135.51	27296		090 01:57:08	-97.56	18349		090 02:12:01	176.53	7794	
090 04:01:58	-161.02	27297		090 03:38:23	-122.87	18350		090 03:54:07	151.01	7795	
090 05:44:00	173.47	27298		090 05:19:38	-148.19	18351		090 05:36:14	125.48	7796	
090 07:26:01	147.98	27299		090 07:00:52	-173.49	18352		090 07:18:20	99.96	7797	
090 09:08:03	122.47	27300		090 08:42:07	161.19	18353		090 09:00:26	74.43	7798	
090 10:50:05	96.97	27301		090 10:23:22	135.87	18354		090 10:42:33	48.90	7799	
090 12:32:07	71.46	27302		090 12:04:36	110.57	18355		090 12:24:39	23.38	7800	
090 14:14:09	45.95	27303		090 13:45:51	85.26	18356		090 14:06:46	-2.16	7801	
090 15:56:11	20.44	27304		090 15:27:05	59.95	18357		090 15:48:52	-27.68	7802	
090 17:38:12	-5.05	27305		090 17:08:20	34.64	18358		090 17:30:58	-53.20	7803	
090 19:20:14	-30.56	27306		090 18:49:35	9.32	18359		090 19:13:05	-78.73	7804	
090 21:02:16	-56.07	27307		090 20:30:49	-15.98	18360		090 20:55:11	-104.25	7805	
090 22:44:18	-81.57	27308		090 22:12:04	-41.30	18361		090 22:37:17	-129.78	7806	
				090 23:53:18	-66.60	18362					

SATELLITE C2						
Ascending Node Predictions						
Predicting for 183 days						
TIME (GMT)	E LONG	ORBIT				
day hr mn sc	deg dg					
091 00:20:09	-125.16	35208				
091 02:05:01	-151.51	35209				
091 03:49:53	-177.85	35210				
091 05:34:45	155.81	35211				
091 07:19:37	129.47	35212				
091 09:04:29	103.12	35213				
091 10:49:21	76.78	35214				
091 12:34:13	50.44	35215				
091 14:19:05	24.10	35216				
091 16:03:57	-2.25	35217				
091 17:48:49	-28.59	35218				
091 19:33:41	-54.93	35219				
091 21:18:33	-81.27	35220				
091 23:03:25	-107.61	35221				

SATELLITE C3						
Ascending Node Predictions						
Predicting for 183 days						
TIME (GMT)	E LONG	ORBIT				
day hr mn sc	deg dg					
091 01:23:14	-90.85	28948				
091 03:08:10	-117.20	28949				
091 04:53:05	-143.56	28950				
091 06:38:00	-169.92	28951				
091 08:22:55	163.73	28952				
091 10:07:50	137.37	28953				
091 11:52:45	111.02	28954				
091 13:37:40	84.66	28955				
091 15:22:36	58.31	28956				
091 17:07:31	31.95	28957				
091 18:52:26	5.60	28958				
091 20:37:21	-20.76	28959				
091 22:22:16	-47.11	28960				

SATELLITE C4						
Ascending Node Predictions						
Predicting for 183 days						
TIME (GMT)	E LONG	ORBIT				
day hr mn sc	deg dg					
091 00:51:24	139.99	3713				
091 02:36:18	113.64	3714				
091 04:21:12	87.29	3715				
091 06:06:06	60.94	3716				
091 07:51:00	34.59	3717				
091 09:35:54	8.24	3718				
091 11:20:48	-18.11	3719				
091 13:05:42	-44.46	3720				
091 14:50:36	-70.81	3721				
091 16:35:30	-97.16	3722				
091 18:20:24	-123.51	3723				
091 20:05:18	-149.86	3724				
091 21:50:12	-176.21	3725				
091 23:35:06	157.44	3726				

092 00:48:17	-133.96	35222
092 02:33:09	-160.30	35223
092 04:18:01	173.36	35224
092 06:02:53	147.02	35225
092 07:47:45	120.67	35226
092 09:32:37	94.33	35227
092 11:17:29	67.99	35228
092 13:02:21	41.65	35229
092 14:47:13	15.30	35230
092 16:32:05	-11.04	35231
092 18:16:57	-37.38	35232
092 20:01:49	-63.72	35233
092 21:46:41	-90.06	35234
092 23:31:33	-116.41	35235

092 00:07:11	-73.47	28961
092 01:52:07	-99.82	28962
092 03:37:02	-126.18	28963
092 05:21:57	-152.53	28964
092 07:06:52	-178.89	28965
092 08:51:47	154.75	28966
092 10:36:42	128.40	28967
092 12:21:37	102.04	28968
092 14:06:33	75.69	28969
092 15:51:28	49.33	28970
092 17:36:23	22.98	28971
092 19:21:18	-3.38	28972
092 21:06:13	-29.73	28973
092 22:51:08	-56.09	28974

092 01:20:00	131.09	3727
092 03:04:54	104.74	3728
092 04:49:48	78.39	3729
092 06:34:42	52.04	3730
092 08:19:36	25.69	3731
092 10:04:30	-6.67	3732
092 11:49:24	-27.02	3733
092 13:34:18	-53.37	3734
092 15:19:12	-79.72	3735
092 17:04:06	-106.07	3736
092 18:49:00	-132.42	3737
092 20:33:54	-158.77	3738
092 22:18:48	174.88	3739

093 01:16:25	-142.75	35236
093 03:01:17	-169.09	35237
093 04:46:09	164.57	35238
093 06:31:01	138.22	35239
093 08:15:53	111.88	35240
093 10:00:45	85.54	35241
093 11:45:37	59.20	35242
093 13:30:29	32.85	35243
093 15:15:21	6.51	35244
093 17:00:13	-19.83	35245
093 18:45:05	-46.17	35246
093 20:29:57	-72.51	35247
093 22:14:49	-98.86	35248
093 23:59:41	-125.20	35249

093 00:36:04	-82.44	28975
093 02:20:59	-108.80	28976
093 04:05:54	-135.15	28977
093 05:50:49	-161.51	28978
093 07:35:44	172.13	28979
093 09:20:39	145.78	28980
093 11:05:35	119.43	28981
093 12:50:30	93.07	28982
093 14:35:25	66.71	28983
093 16:20:20	40.36	28984
093 18:05:15	14.00	28985
093 19:50:10	-12.35	28986
093 21:35:05	-38.71	28987
093 23:20:01	-65.06	28988

093 00:03:42	148.53	3740
093 01:48:36	122.18	3741
093 03:33:30	95.83	3742
093 05:18:24	69.08	3743
093 07:03:18	43.13	3744
093 08:48:12	16.78	3745
093 10:33:07	-9.57	3746
093 12:18:01	-35.92	3747
093 14:02:55	-62.27	3748
093 15:47:49	-88.62	3749
093 17:32:43	-114.97	3750
093 19:17:37	-141.32	3751
093 21:02:31	-167.67	3752
093 22:47:25	165.98	3753

094 01:44:33	-151.54	35250
094 03:29:25	-177.88	35251
094 05:14:17	155.77	35252
094 06:59:09	129.43	35253
094 08:44:01	103.09	35254
094 10:28:53	76.75	35255
094 12:13:45	50.40	35256
094 13:58:37	24.06	35257
094 15:43:29	-2.28	35258
094 17:28:21	-28.62	35259
094 19:13:13	-54.96	35260
094 20:58:05	-81.31	35261
094 22:42:57	-107.65	35262

094 01:04:56	-91.42	28989
094 02:49:51	-117.77	28990
094 04:34:46	-144.13	28991
094 06:19:41	-170.49	28992
094 08:04:36	163.16	28993
094 09:49:32	136.81	28994
094 11:34:27	110.45	28995
094 13:19:22	84.09	28996
094 15:04:17	57.74	28997
094 16:49:12	31.38	28998
094 18:34:07	5.03	28999
094 20:19:02	-21.33	29000
094 22:03:58	-47.68	29001
094 23:48:53	-74.04	29002

094 00:32:19	139.63	3754
094 02:17:13	113.27	3755
094 04:02:07	86.92	3756
094 05:47:01	60.57	3757
094 07:31:55	34.22	3758
094 09:16:49	7.87	3759
094 11:01:43	-18.48	3760
094 12:46:37	-44.83	3761
094 14:31:31	-71.18	3762
094 16:16:25	-97.53	3763
094 18:01:19	-123.88	3764
094 19:46:13	-150.23	3765
094 21:31:07	-176.58	3766
094 23:16:01	157.07	3767

**SATELLITE S2****Ascending Node Predictions**

Predicting for 182 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

091 00:26:20	-107.08	27309
091 02:08:22	-132.59	27310
091 03:50:23	-158.08	27311
091 05:32:25	176.41	27312
091 07:14:27	150.90	27313
091 08:56:29	125.40	27314
091 10:38:31	99.89	27315
091 12:20:33	74.38	27316
091 14:02:34	48.89	27317
091 15:44:36	23.38	27318
091 17:26:38	-2.13	27319
091 19:08:40	-27.63	27320
091 20:50:42	-53.14	27321
091 22:32:44	-78.65	27322

**SATELLITE S3****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

091 01:34:33	-91.92	18363
091 03:15:48	-117.24	18364
091 04:57:02	-142.54	18365
091 06:38:17	-167.86	18366
091 08:19:31	166.84	18367
091 10:00:46	141.52	18368
091 11:42:01	116.21	18369
091 13:23:15	90.90	18370
091 15:04:30	65.59	18371
091 16:45:44	40.28	18372
091 18:26:59	14.97	18373
091 20:08:14	-10.35	18374
091 21:49:28	-35.65	18375
091 23:30:43	-60.97	18376

**SATELLITE S4****Ascending Node Predictions**

Predicting for 183 days

TIME (GMT)	E LONG	ORBIT
day hr mn sc	deg dg	

091 00:19:24	-155.31	7807
091 02:01:30	179.17	7808
091 03:43:36	153.65	7809
091 05:25:43	128.11	7810
091 07:07:49	102.59	7811
091 08:49:55	77.07	7812
091 10:32:02	51.54	7813
091 12:14:08	26.01	7814
091 13:56:14	.49	7815
091 15:38:21	-25.04	7816
091 17:20:27	-50.56	7817
091 19:02:33	-76.08	7818
091 20:44:40	-101.62	7819
091 22:26:46	-127.14	7820

092 00:14:46	-104.16	27323
092 01:56:47	-129.65	27324
092 03:38:49	-155.16	27325
092 05:20:51	179.33	27326
092 07:02:53	153.83	27327
092 08:44:55	128.32	27328
092 10:26:57	102.81	27329
092 12:08:58	77.32	27330
092 13:51:00	51.81	27331
092 15:33:02	26.30	27332
092 17:15:04	.80	27333
092 18:57:06	-24.71	27334
092 20:39:08	-50.22	27335
092 22:21:09	-75.71	27336

092 01:11:57	-86.27	18377
092 02:53:12	-111.59	18378
092 04:34:27	-136.90	18379
092 06:15:41	-162.21	18380
092 07:56:56	172.48	18381
092 09:38:10	147.17	18382
092 11:19:25	121.86	18383
092 13:00:40	96.54	18384
092 14:41:54	71.24	18385
092 16:23:09	45.92	18386
092 18:04:23	20.62	18387
092 19:45:38	-4.70	18388
092 21:26:53	-30.02	18389
092 23:08:07	-55.32	18390

092 00:08:52	-152.66	7821
092 01:50:59	-178.20	7822
092 03:33:05	156.28	7823
092 05:15:11	130.76	7824
092 06:57:18	105.23	7825
092 08:39:24	79.71	7826
092 10:21:30	54.18	7827
092 12:03:37	28.65	7828
092 13:45:43	3.13	7829
092 15:27:49	-22.39	7830
092 17:09:56	-47.93	7831
092 18:52:02	-73.45	7832
092 20:34:08	-98.97	7833
092 22:16:15	-124.50	7834
092 23:58:21	-150.03	7835

093 00:03:11	-101.22	27337
093 01:45:13	-126.73	27338
093 03:27:15	-152.23	27339
093 05:09:17	-177.74	27340
093 06:51:19	156.75	27341
093 08:33:21	131.24	27342
093 10:15:22	105.75	27343
093 11:57:24	80.24	27344
093 13:39:26	54.73	27345
093 15:21:28	29.23	27346
093 17:03:30	3.72	27347
093 18:45:32	-21.79	27348
093 20:27:33	-47.28	27349
093 22:09:35	-72.79	27350
093 23:51:37	-98.30	27351

093 00:49:22	-80.64	18391
093 02:30:36	-105.94	18392
093 04:11:51	-131.26	18393
093 05:53:06	-156.57	18394
093 07:34:20	178.12	18395
093 09:15:35	152.81	18396
093 10:56:49	127.50	18397
093 12:38:04	102.19	18398
093 14:19:19	76.87	18399
093 16:00:33	51.57	18400
093 17:41:48	26.25	18401
093 19:23:02	.95	18402
093 21:04:17	-24.37	18403
093 22:45:32	-49.68	18404

093 01:40:27	-175.55	7836
093 03:22:34	158.92	7837
093 05:04:40	133.40	7838
093 06:46:46	107.88	7839
093 08:28:53	82.34	7840
093 10:10:59	56.82	7841
093 11:53:05	31.30	7842
093 13:35:12	5.76	7843
093 15:17:18	-19.76	7844
093 16:59:24	-45.28	7845
093 18:41:31	-70.81	7846
093 20:23:37	-96.33	7847
093 22:05:43	-121.86	7848
093 23:47:50	-147.39	7849

094 01:33:39	-123.80	27352
094 03:15:41	-149.31	27353
094 04:57:43	-174.82	27354
094 06:39:44	159.69	27355
094 08:21:46	134.18	27356
094 10:03:48	108.67	27357
094 11:45:50	83.16	27358
094 13:27:52	57.66	27359
094 15:09:54	32.15	27360
094 16:51:55	6.66	27361
094 18:33:57	-18.85	27362
094 20:15:59	-44.36	27363
094 21:58:01	-69.87	27364
094 23:40:03	-95.37	27365

094 00:26:46	-74.99	18405
094 02:08:01	-100.30	18406
094 03:49:16	-125.62	18407
094 05:30:30	-150.92	18408
094 07:11:45	-176.24	18409
094 08:52:59	158.46	18410
094 10:34:14	133.14	18411
094 12:15:29	107.82	18412
094 13:56:43	82.52	18413
094 15:37:58	57.20	18414
094 17:19:12	31.90	18415
094 19:00:27	6.58	18416
094 20:41:42	-18.73	18417
094 22:22:56	-44.04	18418

094 01:29:56	-172.91	7850
094 03:12:02	161.57	7851
094 04:54:09	136.03	7852
094 06:36:15	110.51	7853
094 08:18:21	84.99	7854
094 10:00:28	59.46	7855
094 11:42:34	33.93	7856
094 13:24:40	8.41	7857
094 15:06:47	-17.12	7858
094 16:48:53	-42.64	7859
094 18:30:59	-68.16	7860
094 20:13:06	-93.70	7861
094 21:55:12	-119.22	7862
094 23:37:18	-144.74	7863

SATELLITE C2							SATELLITE C3							SATELLITE C4																																																																								
Ascending Node Predictions							Ascending Node Predictions							Ascending Node Predictions																																																																								
Predicting for 183 days							Predicting for 183 days							Predicting for 183 days																																																																								
TIME (GMT)			E LONG			ORBIT			TIME (GMT)			E LONG			ORBIT			TIME (GMT)																																																																				
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg	day	hr	mn	sc																																																																	
095 00:27:49	-133.99	35263	095 01:33:48	-100.39	29003	095 01:00:55	130.72	3768	095 02:12:41	-160.33	35264	095 02:45:49	104.37	3769	095 03:57:33	173.32	35265	095 04:30:43	78.02	3770	095 05:42:25	146.98	35266	095 06:15:37	51.67	3771	095 07:27:17	120.64	35267	095 08:00:31	25.32	3772	095 09:12:09	94.30	35268	095 09:45:25	-1.04	3773	095 10:57:01	67.95	35269	095 11:30:19	-27.39	3774	095 12:41:53	41.61	35270	095 13:15:13	-53.74	3775	095 14:26:45	15.27	35271	095 15:00:07	-80.09	3776	095 16:11:37	-11.07	35272	095 16:45:01	-106.44	3777	095 17:56:29	-37.41	35273	095 18:29:55	-132.79	3778	095 19:41:21	-63.76	35274	095 19:14:49	-159.14	3779	095 21:26:13	-90.10	35275	095 21:59:43	174.51	3780	095 23:11:05	-116.44	35276	095 23:44:37	148.16	3781
096 00:55:57	-142.78	35277	096 00:17:45	-83.01	29016	096 01:29:31	121.81	3782	096 02:40:49	-169.13	35278	096 03:14:25	95.46	3783	096 04:25:41	164.53	35279	096 04:59:19	69.11	3784	096 06:10:33	138.19	35280	096 05:32:30	-162.08	3785	096 07:55:25	111.85	35281	096 07:17:26	171.57	3786	096 09:40:17	85.50	35282	096 09:02:21	145.21	3787	096 11:25:09	59.16	35283	096 10:47:16	118.85	3788	096 13:10:01	32.82	35284	096 12:32:11	92.50	3789	096 14:54:53	6.48	35285	096 14:17:06	66.14	3790	096 16:39:45	-19.87	35286	096 16:02:01	39.79	3791	096 18:24:37	-46.21	35287	096 17:46:57	13.43	3792	096 20:09:29	-72.55	35288	096 19:31:52	-12.92	3793	096 21:54:21	-98.89	35289	096 21:16:47	-39.28	3794	096 23:39:13	-125.23	35290	096 23:01:42	-65.63	3794
097 01:24:05	-151.58	35291	097 00:46:37	-91.99	29030	097 00:13:13	139.25	3795	097 03:08:57	-177.92	35292	097 01:58:07	112.90	3796	097 04:53:49	155.74	35293	097 03:43:01	86.55	3797	097 06:38:41	129.40	35294	097 05:27:55	60.20	3798	097 08:23:33	103.05	35295	097 07:12:49	33.85	3799	097 10:08:25	76.71	35296	097 08:57:43	7.50	3800	097 11:53:17	50.37	35297	097 11:16:08	109.88	3801	097 13:38:09	24.03	35298	097 13:01:03	83.52	3802	097 15:23:01	-2.32	35299	097 14:45:58	57.17	3803	097 17:07:53	-28.66	35300	097 16:30:54	30.81	3804	097 18:52:45	-55.00	35301	097 18:15:49	4.46	3805	097 20:37:37	-81.34	35302	097 20:00:44	-21.90	3806	097 22:22:29	-107.68	35303	097 21:45:39	-48.25	3807				097 23:30:34	-74.61	3808
098 00:07:21	-134.03	35304	098 01:15:29	-100.96	29044	098 00:41:49	130.34	3809	098 01:52:13	-160.37	35305	098 02:26:43	103.99	3810	098 03:37:05	173.29	35306	098 04:11:37	77.64	3811	098 05:21:57	146.95	35307	098 05:56:31	51.29	3812	098 07:06:49	120.60	35308	098 07:41:25	24.94	3813	098 08:51:41	94.26	35309	098 09:26:19	-1.41	3814	098 10:36:33	67.92	35310	098 11:11:13	-27.76	3815	098 12:21:25	41.58	35311	098 12:56:07	-54.11	3816	098 14:06:17	15.23	35312	098 14:41:01	-80.46	3817	098 15:51:09	-11.11	35313	098 16:25:55	-106.81	3818	098 17:36:01	-37.45	35314	098 18:10:50	-133.16	3819	098 19:20:53	-63.79	35315	098 19:55:44	-159.51	3820	098 21:05:45	-90.14	35316	098 21:40:38	174.14	3821	098 22:50:37	-116.48	35317	098 23:25:32	147.79	3822

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT
day hr mn sc	deg	dg		day hr mn sc	deg	dg		day hr mn sc	deg	dg	
095 01:22:05	-120.88	27366		095 00:04:11	-69.35	18419		095 01:19:25	-170.28	7864	
095 03:04:07	-146.39	27367		095 01:45:25	-94.66	18420		095 03:01:31	164.20	7865	
095 04:46:08	-171.88	27368		095 03:26:40	-119.97	18421		095 04:43:37	138.68	7866	
095 06:28:10	162.61	27369		095 05:07:55	-145.29	18422		095 06:25:44	113.15	7867	
095 08:10:12	137.10	27370		095 06:49:09	-170.59	18423		095 08:07:50	87.63	7868	
095 09:52:14	111.60	27371		095 08:30:24	164.09	18424		095 09:49:56	62.10	7869	
095 11:34:16	86.09	27372		095 10:11:38	138.79	18425		095 11:32:03	36.57	7870	
095 13:16:18	60.58	27373		095 11:52:53	113.47	18426		095 13:14:09	11.05	7871	
095 14:58:19	35.09	27374		095 13:34:08	88.16	18427		095 14:56:15	-14.47	7872	
095 16:40:21	9.58	27375		095 15:15:22	62.85	18428		095 16:38:22	-40.01	7873	
095 18:22:23	-15.93	27376		095 16:56:37	37.54	18429		095 18:20:28	-65.53	7874	
095 20:04:25	-41.44	27377		095 18:37:51	12.23	18430		095 20:02:34	-91.05	7875	
095 21:46:27	-66.94	27378		095 20:19:06	-13.08	18431		095 21:44:41	-116.58	7876	
095 23:28:29	-92.45	27379		095 22:00:21	-38.40	18432		095 23:26:47	-142.11	7877	
				095 23:41:35	-63.70	18433					
096 01:10:30	-117.94	27380		096 01:22:50	-89.02	18434		096 01:08:53	-167.63	7878	
096 02:52:32	-143.45	27381		096 03:04:04	-114.32	18435		096 02:51:00	166.84	7879	
096 04:34:34	-168.96	27382		096 04:45:19	-139.64	18436		096 04:33:06	141.32	7880	
096 06:16:36	165.53	27383		096 06:26:34	-164.96	18437		096 06:15:12	115.80	7881	
096 07:58:38	140.03	27384		096 08:07:48	169.74	18438		096 07:57:19	90.26	7882	
096 09:40:40	114.52	27385		096 09:49:03	144.42	18439		096 09:39:25	64.74	7883	
096 11:22:42	89.01	27386		096 11:30:17	119.12	18440		096 11:21:31	39.22	7884	
096 13:04:43	63.52	27387		096 13:11:32	93.80	18441		096 13:03:38	13.68	7885	
096 14:46:45	38.01	27388		096 14:52:47	68.49	18442		096 14:45:44	-11.84	7886	
096 16:28:47	12.50	27389		096 16:34:01	43.18	18443		096 16:27:50	-37.36	7887	
096 18:10:49	-13.00	27390		096 18:15:16	17.87	18444		096 18:09:57	-62.89	7888	
096 19:52:51	-38.51	27391		096 19:56:30	-7.44	18445		096 19:52:03	-88.41	7889	
096 21:34:53	-64.02	27392		096 21:37:45	-32.75	18446		096 21:34:09	-113.94	7890	
096 23:16:54	-89.51	27393		096 23:19:00	-58.07	18447		096 23:16:16	-139.47	7891	
097 00:58:56	-115.02	27394		097 01:00:14	-83.37	18448		097 00:58:22	-164.99	7892	
097 02:40:58	-140.53	27395		097 02:41:29	-108.69	18449		097 02:40:28	169.49	7893	
097 04:23:00	-166.04	27396		097 04:22:43	-133.99	18450		097 04:22:35	143.95	7894	
097 06:05:02	168.46	27397		097 06:03:58	-159.31	18451		097 06:04:41	118.43	7895	
097 07:47:04	142.95	27398		097 07:45:13	175.38	18452		097 07:46:47	92.91	7896	
097 09:29:05	117.46	27399		097 09:26:27	150.07	18453		097 09:28:54	67.38	7897	
097 11:11:07	91.95	27400		097 11:07:42	124.76	18454		097 11:11:00	41.85	7898	
097 12:53:09	66.44	27401		097 12:48:56	99.45	18455		097 12:53:06	16.33	7899	
097 14:35:11	40.93	27402		097 14:30:11	74.14	18456		097 14:35:13	-9.20	7900	
097 16:17:13	15.43	27403		097 16:11:26	48.82	18457		097 16:17:19	-34.72	7901	
097 17:59:15	-10.08	27404		097 17:52:40	23.52	18458		097 17:59:25	-60.24	7902	
097 19:41:17	-35.59	27405		097 19:33:55	-1.80	18459		097 19:41:32	-85.78	7903	
097 21:23:18	-61.08	27406		097 21:15:09	-27.10	18460		097 21:23:38	-111.30	7904	
097 23:05:20	-86.59	27407		097 22:56:24	-52.42	18461		097 23:05:44	-136.82	7905	
098 00:47:22	-112.10	27408		098 00:37:39	-77.74	18462		098 00:47:51	-162.36	7906	
098 02:29:24	-137.60	27409		098 02:18:53	-103.04	18463		098 02:29:57	172.12	7907	
098 04:11:26	-163.11	27410		098 04:00:08	-128.36	18464		098 04:12:03	146.60	7908	
098 05:53:28	171.38	27411		098 05:41:22	-153.66	18465		098 05:54:10	121.07	7909	
098 07:35:29	145.89	27412		098 07:22:37	-178.98	18466		098 07:36:16	95.55	7910	
098 09:17:31	120.38	27413		098 09:03:52	155.71	18467		098 09:18:22	70.02	7911	
098 10:59:33	94.87	27414		098 10:45:06	130.40	18468		098 11:00:29	44.49	7912	
098 12:41:35	69.36	27415		098 12:26:21	105.09	18469		098 12:42:35	18.97	7913	
098 14:23:37	43.86	27416		098 14:07:35	79.78	18470		098 14:24:41	-6.55	7914	
098 16:05:39	18.35	27417		098 15:48:50	54.47	18471		098 16:06:48	-32.09	7915	
098 17:47:40	-7.14	27418		098 17:30:05	29.15	18472		098 17:48:54	-57.61	7916	
098 19:29:42	-32.65	27419		098 19:11:19	3.85	18473		098 19:31:00	-83.13	7917	
098 21:11:44	-58.16	27420		098 20:52:34	-21.47	18474		098 21:13:07	-108.66	7918	
098 22:53:46	-83.67	27421		098 22:33:48	-46.77	18475		098 22:55:13	-134.19	7919	

**SATELLITE C2**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

099 00:35:29	-142.82	35318
099 02:20:21	-169.16	35319
099 04:05:13	164.50	35320
099 05:50:05	138.15	35321
099 07:34:57	111.81	35322
099 09:19:49	85.47	35323
099 11:04:41	59.13	35324
099 12:49:33	32.78	35325
099 14:34:25	6.44	35326
099 16:19:17	-19.90	35327
099 18:04:09	-46.24	35328
099 19:49:01	-72.59	35329
099 21:33:53	-98.93	35330
099 23:18:45	-125.27	35331

**SATELLITE C3**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

099 01:44:22	-109.94	29058
099 03:29:17	-136.29	29059
099 05:14:12	-162.65	29060
099 06:59:07	171.00	29061
099 08:44:02	144.64	29062
099 10:28:57	118.28	29063
099 12:13:52	91.93	29064
099 13:58:48	65.58	29065
099 15:43:43	39.22	29066
099 17:28:38	12.86	29067
099 19:13:33	-13.49	29068
099 20:58:28	-39.85	29069
099 22:43:23	-66.20	29070

**SATELLITE C4**

**Ascending Node Predictions**  
**Predicting for 183 days**  
**TIME (GMT) E LONG ORBIT**  
**day hr mn sc deg dg**

099 01:10:26	121.44	3823
099 02:55:20	95.09	3824
099 04:40:14	68.74	3825
099 06:25:08	42.39	3826
099 08:10:02	16.04	3827
099 09:54:56	-10.31	3828
099 11:39:50	-36.66	3829
099 13:24:44	-63.02	3830
099 15:09:38	-89.37	3831
099 16:54:32	-115.72	3832
099 18:39:26	-142.07	3833
099 20:24:20	-168.42	3834
099 22:09:14	165.23	3835
099 23:54:08	138.88	3836

100 01:03:37	-151.61	35332
100 02:48:29	-177.95	35333
100 04:33:21	155.70	35334
100 06:18:13	129.36	35335
100 08:03:05	103.02	35336
100 09:47:57	76.68	35337
100 11:32:49	50.33	35338
100 13:17:41	23.99	35339
100 15:02:33	-2.35	35340
100 16:47:25	-28.69	35341
100 18:32:17	-55.04	35342
100 20:17:09	-81.38	35343
100 22:02:01	-107.72	35344
100 23:46:53	-134.06	35345

100 00:28:19	-92.56	29071
100 02:13:14	-118.91	29072
100 03:58:09	-145.27	29073
100 05:43:04	-171.62	29074
100 07:27:59	162.02	29075
100 09:12:54	135.66	29076
100 10:57:49	109.31	29077
100 12:42:45	82.96	29078
100 14:27:40	56.60	29079
100 16:12:35	30.24	29080
100 17:57:30	3.89	29081
100 19:42:25	-22.47	29082
100 21:27:20	-48.82	29083
100 23:12:16	-75.18	29084

100 01:39:02	112.53	3837
100 03:23:56	86.18	3838
100 05:08:50	59.83	3839
100 06:53:44	33.48	3840
100 08:38:38	7.13	3841
100 10:23:32	-19.22	3842
100 12:08:26	-45.57	3843
100 13:53:20	-71.92	3844
100 15:38:14	-98.27	3845
100 17:23:08	-124.62	3846
100 19:08:02	-150.98	3847
100 20:52:56	-177.33	3848
100 22:37:50	156.32	3849

101 01:31:45	-160.41	35346
101 03:16:37	173.25	35347
101 05:01:29	146.91	35348
101 06:46:21	120.57	35349
101 08:31:13	94.23	35350
101 10:16:05	67.88	35351
101 12:00:57	41.54	35352
101 13:45:49	15.20	35353
101 15:30:41	-11.14	35354
101 17:15:33	-37.49	35355
101 19:00:25	-63.83	35356
101 20:45:17	-90.17	35357
101 22:30:09	-116.51	35358

101 00:57:11	-101.53	29085
101 02:42:06	-127.89	29086
101 04:27:01	-154.24	29087
101 06:11:56	179.40	29088
101 07:56:51	153.05	29089
101 09:41:46	126.69	29090
101 11:26:42	100.34	29091
101 13:11:37	73.98	29092
101 14:56:32	47.63	29093
101 16:41:27	21.27	29094
101 18:26:22	-5.09	29095
101 20:11:17	-31.44	29096
101 21:56:13	-57.79	29097
101 23:41:08	-84.15	29098

101 00:22:44	129.97	3850
101 02:07:38	103.62	3851
101 03:52:32	77.27	3852
101 05:37:26	50.92	3853
101 07:22:20	24.57	3854
101 09:07:14	-1.78	3855
101 10:52:08	-28.13	3856
101 12:37:02	-54.48	3857
101 14:21:56	-80.83	3858
101 16:06:50	-107.18	3859
101 17:51:44	-133.53	3860
101 19:36:38	-159.98	3861
101 21:21:32	173.77	3862
101 23:06:26	147.42	3863

102 00:15:01	-142.86	35359
102 01:59:53	-169.20	35360
102 03:44:45	164.46	35361
102 05:29:37	138.12	35362
102 07:14:29	111.77	35363
102 08:59:21	85.43	35364
102 10:44:13	59.09	35365
102 12:29:05	32.75	35366
102 14:13:57	6.41	35367
102 15:58:49	-19.94	35368
102 17:43:41	-46.28	35369
102 19:28:33	-72.62	35370
102 21:13:25	-98.96	35371
102 22:58:17	-125.31	35372

102 01:26:03	-110.51	29099
102 03:10:58	-136.86	29100
102 04:55:53	-163.22	29101
102 06:40:48	170.43	29102
102 08:25:43	144.07	29103
102 10:10:39	117.72	29104
102 11:55:34	91.36	29105
102 13:40:29	65.01	29106
102 15:25:24	38.65	29107
102 17:10:19	12.29	29108
102 18:55:14	-14.06	29109
102 20:40:10	-40.41	29110
102 22:25:05	-66.77	29111

102 00:51:20	121.06	3864
102 02:36:14	94.71	3865
102 04:21:08	68.36	3866
102 06:06:02	42.01	3867
102 07:50:56	15.66	3868
102 09:35:50	-10.69	3869
102 11:20:44	-37.04	3870
102 13:05:38	-63.39	3871
102 14:50:32	-89.74	3872
102 16:35:27	-116.09	3873
102 18:20:21	-142.44	3874
102 20:05:15	-168.79	3875
102 21:50:09	164.86	3876
102 23:35:03	138.51	3877

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	day	hr mn sc	deg dg
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg
099 00:35:48	-109.17	27422	099 00:15:03	-72.09	18476	099 00:37:19	-159.71	7920			
099 02:17:50	-134.68	27423	099 01:56:18	-97.40	18477	099 02:19:26	174.76	7921			
099 03:59:52	-160.19	27424	099 03:37:32	-122.71	18478	099 04:01:32	149.24	7922			
099 05:41:53	174.32	27425	099 05:18:47	-148.02	18479	099 05:43:38	123.72	7923			
099 07:23:55	148.81	27426	099 07:00:01	-173.33	18480	099 07:25:45	98.18	7924			
099 09:05:57	123.30	27427	099 08:41:16	161.36	18481	099 09:07:51	72.66	7925			
099 10:47:59	97.80	27428	099 10:22:31	136.04	18482	099 10:49:57	47.14	7926			
099 12:30:01	72.29	27429	099 12:03:45	110.74	18483	099 12:32:04	21.60	7927			
099 14:12:03	46.78	27430	099 13:45:00	85.42	18484	099 14:14:10	-3.92	7928			
099 15:54:04	21.29	27431	099 15:26:14	60.12	18485	099 15:56:16	-29.44	7929			
099 17:36:06	-4.22	27432	099 17:07:29	34.80	18486	099 17:38:23	-54.97	7930			
099 19:18:08	-29.73	27433	099 18:48:44	9.48	18487	099 19:20:29	-80.49	7931			
099 21:00:10	-55.24	27434	099 20:29:58	-15.82	18488	099 21:02:35	-106.02	7932			
099 22:42:12	-80.74	27435	099 22:11:13	-41.14	18489	099 22:44:42	-131.55	7933			
			099 23:52:27	-66.44	18490						
100 00:24:14	-106.25	27436	100 01:33:42	-91.76	18491	100 00:26:48	-157.07	7934			
100 02:06:16	-131.76	27437	100 03:14:57	-117.07	18492	100 02:08:54	177.41	7935			
100 03:48:17	-157.25	27438	100 04:56:11	-142.38	18493	100 03:51:01	151.87	7936			
100 05:30:19	177.24	27439	100 06:37:26	-167.69	18494	100 05:33:07	126.35	7937			
100 07:12:21	151.73	27440	100 08:18:40	167.00	18495	100 07:15:13	100.83	7938			
100 08:54:23	126.23	27441	100 09:59:55	141.69	18496	100 08:57:20	75.29	7939			
100 10:36:25	100.72	27442	100 11:41:10	116.37	18497	100 10:39:26	49.77	7940			
100 12:18:27	75.21	27443	100 13:22:24	91.07	18498	100 12:21:32	24.25	7941			
100 14:00:28	49.72	27444	100 15:03:39	65.75	18499	100 14:03:39	-1.28	7942			
100 15:42:30	24.21	27445	100 16:44:53	40.45	18500	100 15:45:45	-26.80	7943			
100 17:24:32	-1.30	27446	100 18:26:08	15.13	18501	100 17:27:51	-52.32	7944			
100 19:06:34	-26.80	27447	100 20:07:23	-10.19	18502	100 19:09:57	-77.85	7945			
100 20:48:36	-52.31	27448	100 21:48:37	-35.49	18503	100 20:52:04	-103.38	7946			
100 22:30:38	-77.82	27449	100 23:29:52	-60.81	18504	100 22:34:10	-128.90	7947			
101 00:12:39	-103.31	27450	101 01:11:06	-86.11	18505	101 00:16:16	-154.42	7948			
101 01:54:41	-128.82	27451	101 02:52:21	-111.42	18506	101 01:58:23	-179.96	7949			
101 03:36:43	-154.33	27452	101 04:33:36	-136.74	18507	101 03:40:29	154.52	7950			
101 05:18:45	-179.84	27453	101 06:14:50	-162.04	18508	101 05:22:35	129.00	7951			
101 07:00:47	154.66	27454	101 07:56:05	172.64	18509	101 07:04:42	103.46	7952			
101 08:42:49	129.15	27455	101 09:37:19	147.34	18510	101 08:46:48	77.94	7953			
101 10:24:51	103.64	27456	101 11:18:34	122.02	18511	101 10:28:54	52.42	7954			
101 12:06:52	78.15	27457	101 12:59:49	96.70	18512	101 12:11:01	26.89	7955			
101 13:48:54	52.64	27458	101 14:41:03	71.40	18513	101 13:53:07	1.37	7956			
101 15:30:56	27.13	27459	101 16:22:18	46.08	18514	101 15:35:13	-24.15	7957			
101 17:12:58	1.63	27460	101 18:03:32	20.78	18515	101 17:17:20	-49.69	7958			
101 18:55:00	-23.88	27461	101 19:44:47	-4.54	18516	101 18:59:26	-75.21	7959			
101 20:37:02	-49.39	27462	101 21:26:02	-29.85	18517	101 20:41:32	-100.73	7960			
101 22:19:03	-74.88	27463	101 23:07:16	-55.16	18518	101 22:23:39	-126.27	7961			
102 00:01:05	-100.39	27464	102 00:48:31	-80.47	18519	102 00:05:45	-151.79	7962			
102 01:43:07	-125.90	27465	102 02:29:45	-105.78	18520	102 01:47:51	-177.31	7963			
102 03:25:09	-151.40	27466	102 04:11:00	-131.09	18521	102 03:29:58	157.16	7964			
102 05:07:11	-176.91	27467	102 05:52:15	-156.41	18522	102 05:12:04	131.63	7965			
102 06:49:13	157.58	27468	102 07:33:29	178.29	18523	102 06:54:10	106.11	7966			
102 08:31:14	132.09	27469	102 09:14:44	152.97	18524	102 08:36:17	80.58	7967			
102 10:13:16	106.58	27470	102 10:55:58	127.67	18525	102 10:18:23	55.06	7968			
102 11:55:18	81.07	27471	102 12:37:13	102.35	18526	102 12:00:29	29.54	7969			
102 13:37:20	55.56	27472	102 14:18:28	77.03	18527	102 13:42:36	4.00	7970			
102 15:19:22	30.06	27473	102 15:59:42	51.73	18528	102 15:24:42	-21.52	7971			
102 17:01:24	4.55	27474	102 17:40:57	26.41	18529	102 17:06:48	-47.04	7972			
102 18:43:26	-20.96	27475	102 19:22:11	1.11	18530	102 18:48:55	-72.58	7973			
102 20:25:27	-46.45	27476	102 21:03:26	-24.21	18531	102 20:31:01	-98.10	7974			
102 22:07:29	-71.96	27477	102 22:44:41	-49.52	18532	102 22:13:07	-123.62	7975			
102 23:49:31	-97.47	27478				102 23:55:14	-149.15	7976			

West longitude is negative (-)

SATELLITE C2				SATELLITE C3				SATELLITE C4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 183 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT	TIME (GMT)	E	LONG	ORBIT
day	hr	mn	sc	day	hr	mn	sc	day	hr	mn	sc
deg	dg			deg	dg			deg	dg		
103 00:43:09	-151.63	35373		103 00:10:00	-93.13	29112		103 01:19:57	112.16	3878	
103 02:28:01	-177.99	35374		103 01:54:55	-119.48	29113		103 03:04:51	85.81	3879	
103 04:12:53	155.67	35375		103 03:39:50	-145.84	29114		103 04:49:45	59.46	3880	
103 05:57:45	129.32	35376		103 05:24:45	-172.19	29115		103 06:34:39	33.11	3881	
103 07:42:37	102.98	35377		103 07:09:40	161.45	29116		103 08:19:33	6.76	3882	
103 09:27:29	76.64	35378		103 08:54:36	135.10	29117		103 10:04:27	-19.59	3883	
103 11:12:21	50.30	35379		103 10:39:31	108.74	29118		103 11:49:21	-45.94	3884	
103 12:57:13	23.96	35380		103 12:24:26	82.39	29119		103 13:34:15	-72.30	3885	
103 14:42:05	-2.39	35381		103 14:09:21	56.03	29120		103 15:19:09	-98.65	3886	
103 16:26:57	-28.73	35382		103 15:54:16	29.67	29121		103 17:04:03	-125.00	3887	
103 18:11:49	-55.07	35383		103 17:39:11	3.32	29122		103 18:48:57	-151.35	3888	
103 19:56:41	-81.41	35384		103 19:24:07	-23.03	29123		103 20:33:51	-177.70	3889	
103 21:41:33	-107.76	35385		103 21:09:02	-49.39	29124		103 22:18:45	155.95	3890	
103 23:26:25	-134.10	35386		103 22:53:57	-75.75	29125					
104 01:11:17	-160.44	35387		104 00:38:52	-102.10	29126		104 00:03:39	129.60	3891	
104 02:56:09	173.22	35388		104 02:23:47	-128.46	29127		104 01:48:33	103.25	3892	
104 04:41:01	146.87	35389		104 04:08:42	-154.81	29128		104 03:33:27	76.90	3893	
104 06:25:53	120.53	35390		104 05:53:37	178.83	29129		104 05:18:21	50.55	3894	
104 08:10:45	94.19	35391		104 07:38:33	152.48	29130		104 07:03:15	24.20	3895	
104 09:55:37	67.85	35392		104 09:23:28	126.12	29131		104 08:48:09	-2.15	3896	
104 11:40:29	41.50	35393		104 11:08:23	99.77	29132		104 10:33:03	-28.50	3897	
104 13:25:21	15.16	35394		104 12:53:18	73.41	29133		104 12:17:57	-54.85	3898	
104 15:10:13	-11.18	35395		104 14:38:13	47.06	29134		104 14:02:51	-81.20	3899	
104 16:55:05	-37.52	35396		104 16:23:08	20.70	29135		104 15:47:45	-107.55	3900	
104 18:39:57	-63.87	35397		104 18:08:03	-5.66	29136		104 17:32:39	-133.91	3901	
104 20:24:49	-90.21	35398		104 19:52:59	-32.01	29137		104 19:17:33	-160.26	3902	
104 22:09:41	-116.55	35399		104 21:37:54	-58.36	29138		104 21:02:27	173.39	3903	
104 23:54:33	-142.89	35400		104 23:22:49	-84.72	29139		104 22:47:21	147.04	3904	
105 01:39:25	-169.23	35401		105 01:07:44	-111.08	29140		105 00:32:15	120.69	3905	
105 03:24:17	164.42	35402		105 02:52:39	-137.43	29141		105 02:17:09	94.34	3906	
105 05:09:09	138.08	35403		105 04:37:34	-163.79	29142		105 04:02:03	67.99	3907	
105 06:54:01	111.74	35404		105 06:22:30	169.86	29143		105 05:46:57	41.64	3908	
105 08:38:54	85.40	35405		105 08:07:25	143.50	29144		105 07:31:51	15.29	3909	
105 10:23:46	59.06	35406		105 09:52:20	117.15	29145		105 09:16:45	-11.06	3910	
105 12:08:38	32.71	35407		105 11:37:15	90.79	29146		105 11:01:39	-37.41	3911	
105 13:53:30	6.37	35408		105 13:22:10	64.44	29147		105 12:46:33	-63.76	3912	
105 15:38:22	-19.97	35409		105 15:07:05	38.08	29148		105 14:31:27	-90.11	3913	
105 17:23:14	-46.31	35410		105 16:52:00	11.72	29149		105 16:16:21	-116.46	3914	
105 19:08:06	-72.66	35411		105 18:36:56	-14.63	29150		105 18:01:15	-142.81	3915	
105 20:52:58	-99.00	35412		105 20:21:51	-40.98	29151		105 19:46:09	-169.16	3916	
105 22:37:50	-125.34	35413		105 22:06:46	-67.34	29152		105 21:31:03	164.48	3917	
				105 23:51:41	-93.70	29153		105 23:15:57	138.13	3918	

SATELLITE S2				SATELLITE S3				SATELLITE S4			
Ascending Node Predictions				Ascending Node Predictions				Ascending Node Predictions			
Predicting for 182 days				Predicting for 183 days				Predicting for 183 days			
TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	TIME (GMT)	E LONG	ORBIT	day	hr mn sc	deg dg
day	hr	mn	sc	deg	dg	day	hr	mn	sc	deg	dg
103 01:31:33	-122.97	27479	103 00:25:55	-74.83	18533	103 01:37:20	-174.67	7977			
103 03:13:35	-148.48	27480	103 02:07:10	-100.14	18534	103 03:19:26	159.80	7978			
103 04:55:37	-173.99	27481	103 03:48:24	-125.45	18535	103 05:01:33	134.27	7979			
103 06:37:38	160.52	27482	103 05:29:39	-150.76	18536	103 06:43:39	108.75	7980			
103 08:19:40	135.01	27483	103 07:10:54	-176.08	18537	103 08:25:45	83.23	7981			
103 10:01:42	109.50	27484	103 08:52:08	158.62	18538	103 10:07:52	57.69	7982			
103 11:43:44	84.00	27485	103 10:33:23	133.30	18539	103 11:49:58	32.17	7983			
103 13:25:46	58.49	27486	103 12:14:37	108.00	18540	103 13:32:04	6.65	7984			
103 15:07:48	32.98	27487	103 13:55:52	82.68	18541	103 15:14:11	-10.88	7985			
103 16:49:50	7.47	27488	103 15:37:07	57.37	18542	103 16:56:17	-44.41	7986			
103 18:31:51	-18.02	27489	103 17:18:21	32.06	18543	103 18:38:23	-69.93	7987			
103 20:13:53	-43.53	27490	103 18:59:36	6.75	18544	103 20:20:30	-95.46	7988			
103 21:55:55	-69.04	27491	103 20:40:50	-18.56	18545	103 22:02:36	-120.98	7989			
103 23:37:57	-94.54	27492	103 22:22:05	-43.87	18546	103 23:44:42	-146.50	7990			
104 01:19:59	-120.05	27493	104 00:03:20	-69.19	18547	104 01:26:49	-172.04	7991			
104 03:02:01	-145.56	27494	104 01:44:34	-94.49	18548	104 03:08:55	162.44	7992			
104 04:44:02	-171.05	27495	104 03:25:49	-119.81	18549	104 04:51:01	136.92	7993			
104 06:26:04	163.44	27496	104 05:07:03	-145.11	18550	104 06:33:08	111.38	7994			
104 08:08:06	137.93	27497	104 06:48:18	-170.43	18551	104 08:15:14	85.86	7995			
104 09:50:08	112.43	27498	104 08:29:33	164.25	18552	104 09:57:20	60.34	7996			
104 11:32:10	86.92	27499	104 10:10:47	138.95	18553	104 11:39:27	34.81	7997			
104 13:14:12	61.41	27500	104 11:52:02	113.63	18554	104 13:21:33	9.29	7998			
104 14:56:13	35.92	27501	104 13:33:16	88.33	18555	104 15:03:39	-16.24	7999			
104 16:38:15	10.41	27502	104 15:14:31	63.01	18556	104 16:45:46	-41.77	8000			
104 18:20:17	-15.10	27503	104 16:55:46	37.70	18557	104 18:27:52	-67.29	8001			
104 20:02:19	-40.60	27504	104 18:37:00	12.39	18558	104 20:09:58	-92.81	8002			
104 21:44:21	-66.11	27505	104 20:18:15	-12.92	18559	104 21:52:05	-118.35	8003			
104 23:26:23	-91.62	27506	104 21:59:29	-38.23	18560	104 23:34:11	-143.87	8004			
			104 23:40:44	-63.54	18561						
105 01:21:59	-88.86	18562	105 01:16:17	-169.39	8005						
105 03:03:13	-114.16	18563	105 02:58:24	165.07	8006						
105 04:44:28	-139.48	18564	105 04:40:30	139.55	8007						
105 06:25:42	-164.78	18565	105 06:22:36	114.03	8008						
105 08:06:57	169.90	18566	105 08:04:43	88.50	8009						
105 09:48:12	144.58	18567	105 09:46:49	62.98	8010						
105 11:29:26	119.28	18568	105 11:28:55	37.45	8011						
105 13:10:41	93.96	18569	105 13:11:02	11.92	8012						
105 14:51:55	68.66	18570	105 14:53:08	-13.60	8013						
105 16:33:10	43.35	18571	105 16:35:14	-39.12	8014						
105 18:14:25	18.03	18572	105 18:17:21	-64.66	8015						
105 19:55:39	-7.27	18573	105 19:59:27	-90.18	8016						
105 21:36:54	-32.59	18574	105 21:41:33	-115.70	8017						
105 23:18:08	-57.89	18575	105 23:23:40	-141.23	8018						



## Report Documentation Page

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16. Abstract  This report is an analog aid to determine satellite coverage of Emergency Locator Transmitter (ELT)/Emergency Position Indicating Radio Beacon (EPIRB) distress incidents. The predicted orbits listed cover the period from October 16, 1989 through April 15, 1990. The predictor allows the user to determine if a selected position will probably be detected, and is composed of a base map and a satellite track overlay for each satellite.			
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